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Towards an Open Dialogue on Sufficiency and Growth

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Abstract

The state of our planet is highly concerning. Looking at the rising greenhouse gas emissions, the accelerating resource depletion or the vast pollution of our biosphere, it is clear that past efforts to reduce the ever growing impact from human activity in the form of *efficiency strategies* or *green growth* have failed completely. New, and more drastic measures are needed that go beyond contemporary efforts. Sufficiency strategies that aim at reducing the overall environmental impact by limiting per capita and total consumption are the only viable strategies (besides limiting or reducing world population) to avoid the inauspicious future outlook presented by climate scientists at this point. An open, pragmatic, and constructive public dialogue including all members of the public is important and necessary, to elaborate new strategies for our society, and as starting point for a bigger transformation.

This thesis investigates impediments to such an open public dialogue on sufficiency and growth. It makes out various obstacles in the form of:

- “ Denialism in its various forms and other maladaptive coping strategies
- “ Helplessness, or the question, *%who is responsible for solving the problems?+*
- “ Hopelessness and Fatalism leading to inaction
- “ The taboo of questioning economic growth
- “ To the large opinion gap, ranging from: *%we need to take immediate and radical action+to;*
%there is no problem in the first place+.

These results show that the obstacles to an open, pragmatic and constructive public dialogue are not only numerous, they are also highly complex, often interdependent and difficult to resolve. Hopes for a timely broad consensus between climate scientists, public opinion and policy makers are limited due to the very nature of the obstacles presented in this thesis. However, an open public dialogue has great potential not only to raise general awareness, but to encourage and enable the emergence of small-scale community based solutions. These in turn are shown to counter many of the observed obstacles and are therefore an important factor in promoting an open, constructive public dialogue on the matter.

Further research about the obstacles and potentials of such small-scale, community based, mutually committed, democratic action is still needed in order to further and more successfully promote them to a broader public.

Zusammenfassung

Der Zustand dieses Planeten ist sehr besorgniserregend. Seien es die stetig steigenden Treibhausgasemissionen, der immer weiter zunehmende Ressourcenverbrauch oder die ausgedehnte Verschmutzung unserer Biosphäre. Die bisherigen Bemühungen, den immer größer werdenden Einfluss auf die Umwelt in Form von Effizienzsteigerungen oder "grünem Wachstum" zu reduzieren, sind vollständig gescheitert. Es sind drastisch Maßnahmen erforderlich, die über die derzeitigen Bemühungen hinausgehen. Suffizienz-Strategien, die darauf abzielen, den globalen Fussabdruck zu reduzieren, indem der pro Kopf Konsum begrenzt wird, sind die einzig gangbaren Strategien (abgesehen von der Begrenzung der Weltpopulation), um die düsteren Zukunftsaussichten zu vermeiden, welche von Klimawissenschaftler präsentiert werden. Ein offener, pragmatischer und konstruktiver öffentlicher Dialog unter Beteiligung aller Exponenten unserer Gesellschaft wäre wichtig und notwendig, um neue gangbare und nachhaltige Wege für unsere Gesellschaft zu finden.

Diese Arbeit untersucht die vielen Hindernisse die einen fairen, konstruktiven und pragmatischen öffentlichen Dialog zum Thema Suffizienz und Wachstum verhindern. Mit Hilfe von Literaturrecherchen werden die Hindernisse, von Tabuisierung, über Verweigerung oder unrealistischen Optimismus bis hin zu Hilflosigkeit und Fatalismus untersucht und mögliche Lösungsansätze präsentiert. Die Ergebnisse zeigen, dass die Hindernisse für einen pragmatischen öffentlichen Dialog nicht nur zahlreich, sondern auch äusserst komplex und oft voneinander abhängig sind. Ein breiter Konsens zwischen Klimawissenschaftlern, der öffentlichen Meinung und den politischen Entscheidungsträgern ist, aufgrund der in dieser Arbeit präsentierter Hindernisse in gegebener Frist nicht zu erwarten.

Ein pragmatischer öffentlicher Dialog birgt dabei aber großes Potenzial, nicht nur um das öffentliche Bewusstsein zu schärfen und potenziellen Druck auf die Politik auszuüben, sondern auch um lokale, kommunale Lösungen zu fördern und zu ermöglichen welche als positive Beispiele eine wichtige Rolle darin spielen, nachhaltige Modelle für die Zukunft zu eruieren und als positive alternativen zum heutigen System zu fungieren.

Weitere Forschung auf dem Gebiet solcher kleinräumigen, lokal orientierten, gemeinschaftlich engagierten, demokratischen Aktionen sind wichtig um ihre Potenziale aufzuzeigen und einer breiten Öffentlichkeit zu vermitteln.

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1 Introduction:

This introduction is structured as follows: The first part presents evidence for the concerning current state of our planet, and the failure of past attempts of sustainable development through %green growth+and efficiency strategies to mitigate the various adverse environmental impacts from human activity.

In the second part the necessity for an open, pragmatic and constructive dialogue is highlighted. The final part presents the aim and structure of this thesis.

1.1 The Current State of our Planet

The pre-studies to this Bachelors work conducted in spring 2017 in form of a semester thesis (Title: %Sufficiency and Growth: an analysis of necessity and acceptance) lead to a series of assumptions and conclusions (Kretz, 2017). In this following section the most important ones are presented:

The first and most universal conclusion that emerged from the pre-studies to this thesis considers the concerning state of our planet's eco-system. It becomes very clear when looking at the vast bodies of scientific literature, that the state of our planets eco-system is highly concerning. Looking at the global climate crisis and the implications from it; the vast pollution of our natural environment; the degradation of ecosystems or the great loss of species and biodiversity, the projected future for life on this planet looks inauspicious and asks for drastic changes to the way we behave as a human race (Rockström, et al., 2009; IPCC, Climate Change 2014: Synthesis Report, 2014; Meadows, Randers, & Meadows, 2004). Minor adjustments or efficiency gains through technological improvements or %green growth+over the past 30 years have completely failed to mitigate the growing impact from economic and population growth. The results are a continuously growing impact from greenhouse gas emissions, an overuse of resources and environmental pollution (Mont & Plepys, 2008; Antal & Van Den Bergh, 2014; Brand, 2012; Ward, et al., 2016).

Although there have been some efficiency gains in developed countries over the course of the past decades, these efficiency gains are far from adequate. As we are currently exceeding the global environmental footprint by a factor of 2.9 (in Switzerland) and are violating various planetary boundaries far beyond their limits, the hope for minor adjustments, or %green growth+to solve our environmental problems is unreasonable (Sorrell, 2010; McMichael, Woodruff, & Hales, 2006; Ward, et al., 2016; Rockström, et al., 2009; Global Footprint Network, 2017).

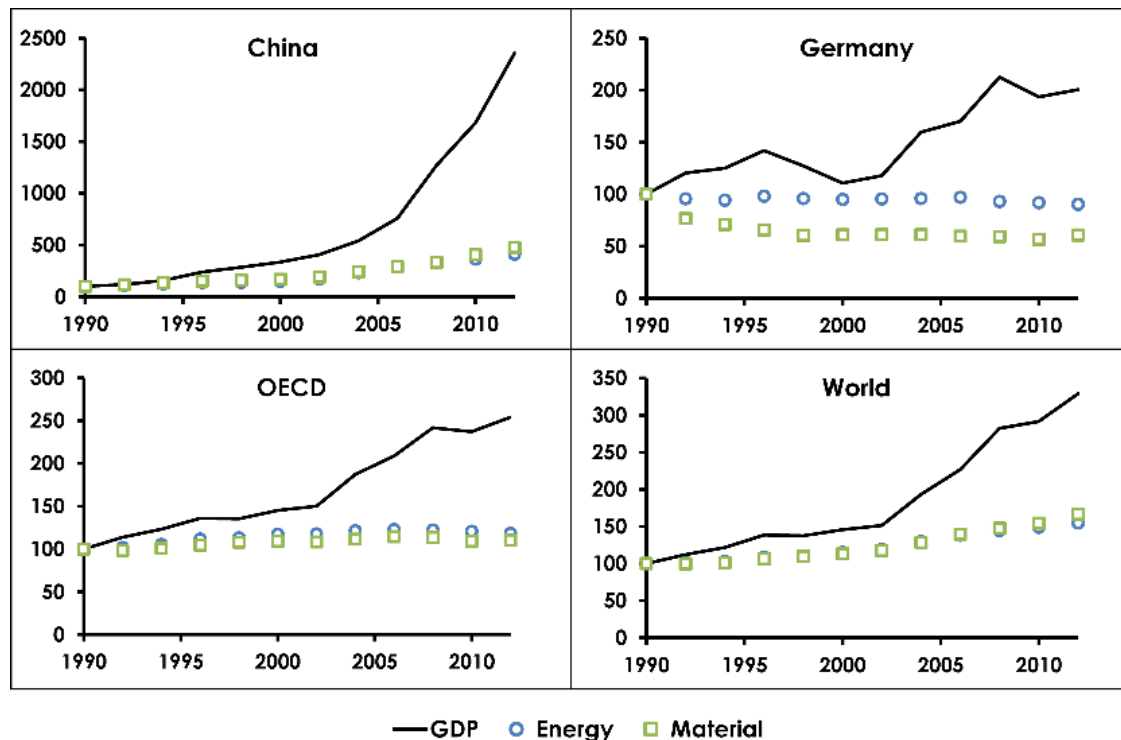


Figure 1: Recent trends in energy-, material use and real GDP. Data normalized to 100 in 1990. Apparent strong relative decoupling in OECD and Germany reasoned in: 1) substituting one resource for another 2) financialization of components of GDP 3) exporting of environmental impact to other regions. (Ward, et al., 2016).

Figure 1 shows, the continuous rise in global energy and material demand over the course of the past decades, despite some efficiency gains being made. Tim Jackson calculates in his book *Prosperity without Growth* that, for limiting the global warming to under 2°C by 2050 while maintaining an economic growth rate of just 2% in industrialized nations and allowing developing nations to catch up, an annual reduction in carbon intensity of 10% would be required (Ward, et al., 2016).

So, in times where the terms *sustainable development* and *sustainability* have made their way into mainstream society and are widely accepted as a necessary and healthy goal for humanity, the emission of greenhouse gasses, the depletion of resources and the pollution of our natural environment continue at a rate above the admissible limit (Kallio, 2007; IPCC, Climate Change 2014: Synthesis Report, 2014; Fournier, 2008). New strategies, which go beyond *green growth* or *increasing efficiency* are therefore needed, as it is clear that if we continue along this path and fail to drastically reduce our impact on the environment in the coming century, devastating impact to the planet and its inhabitants will take place (Hamilton, 2011, p. 21; Crompton & Kasser, 2009).

Hopwood, Mellor and O'Brien concluded in 2005 already:

Embracing the status quo is not a viable option for society if we are to move towards sustainable livelihood for all, now and in the future, within an abundant and diverse environment+- (Hopwood, Mellor, & O'Brien, 2005)

1.2 Unpopular Sufficiency Strategies

In the face of these above described facts, sufficiency strategies which are based around the idea of reducing our environmental impact by limiting our consumption as individuals and as a whole seem obvious (Antal & Van Den Bergh, 2014).

However, as such strategies that promote sufficiency in its different forms, criticize the dependency on perpetual economic growth and are aimed at reducing overall consumption, they are inherently incompatible with our economic system which, in its current form, is dependent on continuous economic growth (Haapanen & Tapio, 2016; Alcott, 2010; Boulanger, 2010; Daly, 1996). A more fundamental change is therefore required in our society and in particular in our economic system, in order to enable and facilitate a wide-range and successful implementation of sufficiency strategies. This sets the barriers to successful implementation of such strategies very high, and despite the ever clearer threats of climate change and environmental degradation to our planet and species, a serious dialogue about sufficiency-, degrowth, or voluntary simplicity strategies in their various different forms has only been possible within a small environmental niche and have currently received little to no mainstream public attention (Hopwood, Mellor, & O'Brien, 2005; Antal & Van Den Bergh, 2014; Daly, 1996; Gössling & Cohen, 2014).

However, as mentioned: if we are to prevent the inauspicious future projections made by climate scientists from becoming reality in the near future, new ways and drastic changes to our current consumption driven lifestyle, and the economic system that promotes it will be inevitable.

Therefore, as Schein (1993 p. 42) writes, "All problem-solving within groups should begin in a dialogue"; western societies would be well advised in starting a serious, open, pragmatic and constructive dialogue on sufficiency, growth and other fundamental questions about the future, and do so rather sooner than later, as it is not a question whether change will happen: it is only the question to what degree by design or disaster+(Victor, 2008).

1.3 Aim and Structure

The main objective for this thesis is to explore and present the various impediments to an open, pragmatic and constructive public dialogue on sufficiency and growth and highlight possible ways to overcome them. Based on literature research and exchange with various exponents and leaders of the current ~~%~~degrowth+movement in Switzerland, this thesis should offer a comprehensive guide through the different obstacles and their underlying causes as well as constructive ways of dealing with them.

In the first part of this thesis, a brief introduction is made to the theoretical backgrounds of dialogue in its different forms. The many obstacles and difficulties to an open, pragmatic and constructive dialogue are explored and presented in the second part of this thesis. The following chapter contains an analysis of a panel discussion titled ~~%~~finite Economic Growth on a Finite Planet+held at the University of Zürich (UZH) in 2016 with prominent panel members. The fourth chapter explores and presents various strategies and possible ways for overcoming the obstacles laid out in chapter two.

The final chapter to this thesis includes a personal reflection and discussion as well as general conclusions from this work. Limitations to this work and a general future outlook will be presented at the end.

2 Dialogue, Discussion or Debate? – Theoretical background

In common language, discourse, debate, discussion and dialogue are often used similarly and are seen practically synonym. But linguistically there are some more or less clear distinctions between most of them. While the difference between discussion and discourse are not clear and the terms are often used as synonyms in scientific literature, generally describing a verbal expression in speech or writing, a debate (from Old French *debatre*: de-, de- + *battre*, to beat) is a more specific term and clearly indicates contrasting or opposing standpoints, a formal contest of argumentation in which two opposing teams defend and attack a given proposition (Fay, Garrod, & Carletta, 2000; Hyde & Bineham, 2000) (AHDict, 2014). A Dialogue stands in contrast to a debate and indicates a mutually beneficial and cooperative form of discussion and is often characterized by openness, honesty, and mutual commitment (Hyde & Bineham, 2000).

Our determination to pursue truth by setting up a fight between two sides leads us to believe that every issue has two sides - no more, no less. If both sides are given a forum to confront each other, all the relevant information will emerge, and the best case will be made for each side. But opposition does not lead to truth when an issue is not composed of two opposing sides but is a crystal of many sides. Often the truth is in the complex middle, not the oversimplified extremes. (Hyde & Bineham, 2000)

In this thesis therefore the term dialogue which indicates a form of mutual learning and understanding in a conversational exchange was chosen and preferred over similar terms; debate, discourse and discussion (Hyde & Bineham, 2000).

However, there are also many different forms of dialogue described in scientific literature, and not all are as inclusive as indicated by Hyde & Bineham (2000). Table 1 shows an example categorization of different types of dialogue, the situation in which they might occur in and the corresponding dialogue goal

Dialogue type	Initial situation	Dialogue goal
Persuasion	Conflicting point of view	Resolution of conflict
Negotiation	Conflict of interest	Making a deal
Inquiry	General ignorance	Growth of knowledge
Deliberation	Need for action	Reach a decision
Information-seeking	Personal ignorance	Spreading knowledge
Eristic	Antagonism	Accommodation in relationship

Table 1: Different dialogue types with corresponding initial situations and dialogue goals as presented by (Walton, 1998, p. 3). Table copied from (Bentahar, Moulin, & Bélanger, 2010).

The different dialogue types or strategies shown in Table 1 might deliberately or non-deliberately be used by participants in discussion.

Further, in this thesis, there is also a need for distinction between an *open+public dialogue*, meaning a dialogue amongst all members and representatives of the public i.e. meant to involve the public at large, and a classical *dialogue+with distinct and limited numbers of participants in a given setting*. Such open public dialogue involving the whole general public, is more commonly referred to as *public discourse+or+public debate+*, but for above mentioned reasons was substituted for the more suiting *public dialogue+with all its potentials*, in this thesis (Stiglitz, 2003, p. 115; Fairclough, 1993).

An *open+public dialogue* therefore does not imply *one+dialogue* but in fact stands for an overall dealing of society with a certain topic, which might take place in newspaper articles, Tv-shows, magazines, radio, or in various public and private spaces such as workplace or family dinners and have a particular group dynamic to them which both influence-, and are influenced by public action (Ellingson, 1995).

This thesis generally deals with obstacles, challenges and opportunities to an open, fair, pragmatic and constructive *public dialogue+* (involving all members of the public) whilst in chapter 4 a panel discussion representing one occurrence of a debate within the broader public dialogue is analyzed and presented.

3 Dialogue Difficulties

In the following chapter obstacles to an open, pragmatic and constructive public dialogue on climate change, sufficiency and growth are identified and outlined. They are identified by means of literature research, interactions with community leaders and exponents of the ~~%de~~growth+ movement in Switzerland. Possible ways to overcome these difficulties will be presented in chapter 5.

A first major obstacle to the anchoring of any public dialogue on climate change and growth is the highly complex nature of the topics. In addition, the current state of research on climate change and its implications are not coherently broadcasted to the public, creating even greater confusion and making possible implications difficult to accept (Kallio, 2007; Crompton & Kasser, 2009).

~~%~~While nuclear annihilation was a binary threat- either nothing changed or everything changed suddenly- climate disruption will occur slowly and with a high degree of certainty.+ (Hamilton & Kasser, 2009)

But even if presented with facts behind climate change, there are multiple ways to deal (or not deal) with its reality on a personal and emotional level that do not necessarily reflect rational behavior (Hamilton & Kasser, 2009). This often makes pragmatic and ideology free, rational discussions difficult and diverts emotions and facts to prevent a constructive and fair dialogue. Collectively as a society (in the west) we seem to be in partial or complete denial of the facts and implications from climate science and have in the past failed to take adequate action or implement sufficient policy changes to lead us back on a sustainable path (Norgaard, 2011). The reasons for which are highly complex and manifold. They range from a series of mechanisms of maladaptive emotional coping strategies (as explained in the following chapter) caused and amplified by confusion, misinformation and unclear facts; institutional denial and lobby activities; unclear responsibilities; and the seemingly overwhelming negative implications of adequate change on our western lifestyle (Hamilton & Kasser, 2009; Daly, 2012; Kallio, 2007; Gössling & Cohen, 2014).

This following chapters aims to give an overview of the complex and often interconnected causes and reasons for the lacking of a pragmatic debate on sufficiency strategies in western societies.

In the first chapter the reasons and mechanisms behind upright denial of climate change science on individual and institutional levels will be discussed and an overview of the more subtle forms of denial and other emotional coping strategies will be presented. The second and third chapter present the reasons for-, and difficulties of help- and hopelessness. Chapter 3.4 investigates the ~~%taboo nature+~~of sufficiency strategies and chapter 3.5 presents the difficulties of a large opinion gap regarding the threats of climate change and possible ways to overcome them. The final chapter presents a list of commonly used arguments against sufficiency strategies.

3.1 Denial

Climate change denial generally can be described as complete or partial dismissal of contemporary climate science or its implications. There exist vast bodies of scientific literature on climate change denial and its prevalence as well as its causes and effects (McCright & Dunlap, 2011; Washington, 2013; Hamilton & Kasser, 2009; Brody et al. 2008; Kellstedt, Zahran, & Vedlitz, 2008). Generally denial could be categorized as %institutional denial+(within governments, economic institutions, media etc.) usually driven by corporate interests, and denial on a personal level driven by psychological factors and the avoidance of negative emotions associated with accepting the grim future outlook that climate scientists overwhelmingly present. Haydn Washington in the introduction to his popular Book %Climate Change denial . Heads in Sand+ writes:

%There is denial within governments, where spin-doctors use 'weasel words' to pretend they are taking action. However there is also denial within most of us, the citizenry. We let denial prosper and we resist the science+- (Washington, 2013).

In the following chapter: firstly the general prevalence and magnitude of denialism will be introduced with numbers from surveys and various literature articles. Secondly the influence and tactics of institutional denialism will be explained and presented. In the third and fourth chapter emotional reasons and backgrounds for personal denial as well as other so-called maladaptive coping strategies will be explained.

3.1.1 Prevalence and Magnitude of Denial

Denial of climate science is common in western societies. Whilst 97% of all peer reviewed articles on climate change related issues agree that climate change is for the most part a man-made phenomenon which is related to our greenhouse gas emissions and other anthropogenic effects (see figure 2). Yet the facts do not seem clear to large parts of the

world population and specifically in industrialized western countries, although the numbers from different surveys vary substantially (Cook, et al., 2016; Kellstedt, Zahran, & Vedlitz, 2008; Howe, Mildenerberger, Marlon, & Leiserowitz, 2015;

Ipsos, 2016). However, studies show that climate change denial is most prevalent in Anglo-Saxon countries, Russia and Japan with just over 70% of the population from the named countries agreeing on human caused climate change. In contrast, Indonesia, Argentina, India, Peru, Mexico, and Spain all had over 85% of the participants of the study agreeing with human caused Climate change (Kellstedt, Zahran, & Vedlitz, 2008). However, other studies show much lower numbers particularly in the US. A study published on the Yale University platform with over 13000 data points from 2015 shows that only 69% of the us population believe global warming is happening at all, with only 52% agreeing that it is caused by human activity and 38% believing climate change will harm them personally (Howe et al., 2015). Studies looking at the prevalence of climate change denial in the United States show that conservative white males are most likely to deny climate science (McCright & Dunlap, 2011). Political orientation is shown in various studies to have a great impact on the perception of climate change. A Pew research center poll from 2016 showed that while 79% of liberal democrats believed in human caused climate change, only 15% of conservative republicans did (McCright & Dunlap, 2011; McCright, Dunlap, & Xiao, 2014; PRC, 2016).

And although the above mentioned numbers may seem high, they only count for upright denial of climate change as an anthropogenic caused phenomenon. The number of citizens actually concerned about climate change is much lower.

Overall only 36% of Americans claimed to be personally concerned about climate issues+ (Funk & Kennedy, 2016). In Switzerland, climate change also seems to be of lesser concern to the public than one might expect from consulting the vast bodies of alarming scientific literature on climate change including the IPCC reports from the past years (IPCC, 2014). In an annual poll executed by

Studies into scientific agreement on human-caused global warming



Figure 5: Results from seven macro-studies, conducted between 2004 and 2015, Pie charts representing the observed consensus in each of the seven studies, highlighting the overwhelming consensus for anthropogenic climate change in scientific literature (Cook, et al., 2016).

the GSF Bern since 2003, Environmental protection consistently shows to be in the bottom third of concerns to the Swiss public (see figure 3).

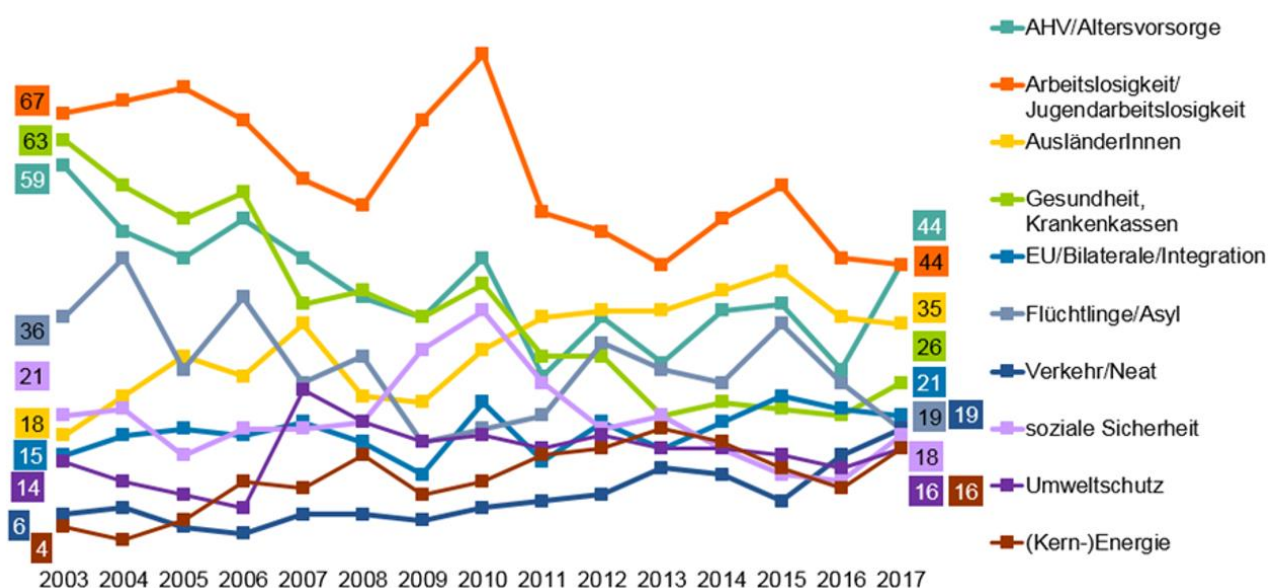


Figure 9: Concerns expressed by the Swiss public for different threats about climate change and other issues from 2003-2017. Questioned as: name the five biggest problems Switzerland is facing? Unemployment consistently stated as biggest problem followed by pension schemes and foreigners since 2010. Environmental protection consistently in the bottom third, ending up as least important problem in 2017 (gfs.bern, 2017).

And whilst concerns about foreigners, traffic, and nuclear power generally have risen, the concern about environmental protection have stayed at a similar level over the past 15 years with a significant peak in 2006/2007 when al Gore released his Movie inconvenient truth (Nolan, 2010). In 2017 environmental concerns even ended up at the very bottom of the list for the first time in 14 years, together with concerns about Nuclear power (gfs.bern, 2017). And Switzerland is not alone in this, as recent studies in other European countries show (Steenjtes, et al., 2017).

This lack of concern stands in great contrast to contemporary climate science drawing an ever darker picture of the future with ever higher certainty (Smith et al., 2011; Hamilton, 2010). The gap between the scientific consensus and public opinion seems to be widening, and although complete denial of climate science in Switzerland may be less prevalent than in the US, the awareness for the issue seems to be lacking substantially. This can in part be explained with psychological adaption strategies on an individual level as will be described in chapters 3.1.3, 3.1.4, but whilst such socio-psychological denial mechanisms or personal coping strategies explain the emotional reasons why people are drawn to denial of facts presented by the scientific community, there is also an institutional level of denial which helps enable denialism and seemingly gives reason for doubt as described in the following chapter.

3.1.2 Money-, Power Structures and Lobbies

As shown, the percentage of western population, particularly in the US, which denies or is misinformed about contemporary climate science is staggering. But whilst misinformation might be an explanation for those numbers in the general population, the fact that even the current US President and more than half of the republican members of the congress and house of representatives in the US deny the existence of climate change or human involvement in it has to be looked at as deliberate effort to cast doubt and confuse the public (Washington, 2013; McCright, Dunlap, & Xiao, 2014). Simple misinformation or lacking of information can hardly be put forward as reason many high profile politicians and business leaders reject the scientific consensus. It seems that the high numbers of climate change deniers, particularly in the US are enabled and fueled by powerful lobbies and influential power structures.

Dunlap and McCright (2011) who have conducted extensive research in the field of denial speak of organized climate change denial and explain:

+Contrarian scientists, fossil fuels corporations, conservative think tanks, and various front groups have assaulted mainstream climate science and scientists for over two decades. The blows have been struck by a well-funded, highly complex, and relatively coordinated denial machine+. It consists of the above actors as well as a bevy of amateur climate bloggers and self-designated experts, public relation firms, astroturf groups, conservative media and pundits, and conservative politicians.+ (Dunlap & McCright, 2011).

Clive Hamilton writes in regard of the growing gap between climate denial by conservative versus liberal Americans:

The opening of the gulf was due to the fact that Republican Party activists, in collaboration with fossil fuel interests and conservative think tanks, had successfully associated acceptance of global warming science with liberal views. In other words, they had activated the human predisposition to adopt views that cement one's connections with cultural groups that strengthen one's definition of self. In the 1990s views on global warming were influenced mostly by attentiveness to the science; now one can make a good guess at an American's opinion on global warming by identifying their views on abortion, same-sex marriage and gun-control.+ (Hamilton, 2010).

These mentioned actors can be considered to be the key drivers of institutional climate denial. The key motivation for actors who are not directly profiting from denialism such as e.g. the fossil fuel

industry seems to be acceptance and the feeling of belonging to a close circle of business elites as well as direct material or financial interest.

The financial support these corporations and business associations provide to conservative think-thanks, individual contrarians and supportive politicians such as Inhofe (often termed ~~the~~ the Senator from oil+) is a vital driver of denialism.+ - (Dunlap & McCright, 2010).

Moreover, this constitutes only one facet of institutional denial. With more than half of the US Republican congress denying climate change publicly and deliberately casting doubt on the IPCC and other environmental organizations and even questioning the very core of the scientific method and the process of peer review (Gössling & Cohen, 2014; McCright, Dunlap, & Xiao, 2014). Washington accuses politicians of using ~~weasel words~~ as part of a propaganda tactic to divert public opinion on climate change in order for them to remain passive on the issue (Washington, 2013).

Manufacturing doubt, disregarding scientific evidence of risks and claiming over-regulation appear to be a deliberate strategy for some industry groups and think thanks to undermine precautionary decision making+- (EEA, 2013; found in Jucker, 2014, p. 49)

The strategy for this alliance seems clear: Manufacturing and spreading doubt. Much in the way, the tobacco industry raised and spread uncertainty concerning the health risks of smoking to stop regulation of their products, the same strategies are used by the fossil fuel industry, although the method has been perfected and the political influence is even more significant in the case of the fossil fuel industry (Dunlap & McCright, 2010).

Big Tobacco⁵ showed the way. The practices it perfected are alive and well and ubiquitous today. We see this growing trend that disingenuously demands proof over precaution in the realm of public health. In field after field, conclusions that might support regulation are always disputed. Animal data are deemed not relevant, human data not representative, and exposure data not reliable. Whatever the story . global warming, sugar and obesity, second-hand smoke . scientists in what I call the ~~product~~ product defense industry+prepare for the release of unfavorable studies even before the studies are published. Public relations experts feed these for-hire scientists contrarian sound bites that play well with reporters, who are mired in the trap of believing there must be two sides to every story - (Dunlap & McCright, 2010)

A recent paper published in 2017 shows how dramatically exponents from the fossil fuel industry attempt to cast doubt on climate science, despite having clear contrary insight: "The present trend of fossil fuel consumption will cause dramatic environmental effects before the year 2050 (Supran & Oreskes, 2017)", as written in one of Exxon Mobil's own peer reviewed papers. Regardless, statements made in their advertorials portray a very different picture to the general public: "Scientists cannot predict with certainty if temperatures will increase, by how much and where changes will occur. We still don't know what role man-made greenhouse gases might play in warming the planet". Figure 4 shows the extent of climate denial propaganda in Exxon advertorials in contrast to the internal Exxon publications and peer-reviewed consensus.

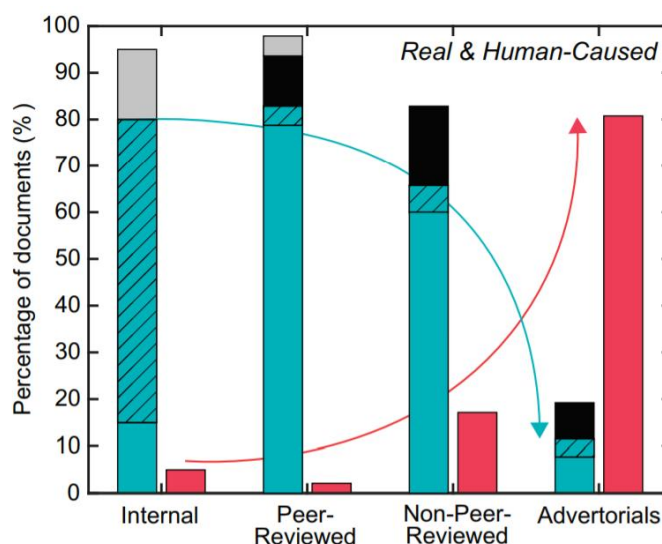


Figure 10: Showing the discrepancy in Exxon Mobil's publications, from Internal Documents to Advertorials (Blue acknowledge, Red doubt). 83% of Exxon sponsored Peer-Reviewed publications Acknowledge anthropogenic climate change; 81% of their advertorials take a position of doubt (Supran & Oreskes, 2017).

"The oil and natural gas industry, the coal industry, arms and weapons manufacturers, industrial farms, deforestation industries, the automotive industry, and chemical plants will not willingly accept their own extinction. They are indifferent to the looming human catastrophe." (Hedges, 2010, p. 293; found in Jucker, 2014, p. 67)

In addition to the mentioned active players, the media also play an important role in enabling denialism (Jucker, 2014). When the highly controversial Princeton University Professor and popular climate change denier William Happer gets equal airtime denying climate science in a TV debate as climate scientists representing the scientific consensus that sends a highly distorted picture to the viewer. Accordingly, when that same Professor is paid or at least allowed to write articles in the Wall Street Journal and other major media outlets claiming the "benefits of rising CO2 levels" that should not go unchallenged (The Wall Street Journal, 2012).

Though it is easy to shift the focus of this problem to the US, climate change denial also remains present in Switzerland and the EU. Whilst upright refutation of climate science may be less prevalent in the EU statements like Donald Trump's Tweet, "among the lowest temperatures EVER in much of the United States. Ice caps at record size. Changed name from GLOBAL WARMING to

CLIMATE CHANGE+do not go unseen in Europe (Dunlap & McCright, 2010; Lorenzoni & Pidgeon, 2006; Ipsos, 2016).

Indeed, as a highly represented media figure, the President has been prolific in his denial of climate change and ridiculing of environmentalists. Furthermore, he is far from alone with such blatant public denial of the scientific consensus amongst the global political elite. In Germany for instance, the right wing party AfD (Alternative für Deutschland) which has become vastly popular in recent years reaching 12.6% in 2017 elections, claims that %contrary to the IPCC report there is no scientific consensus that climate change is manmade+and claims that it is %based solely on computer models that cannot describe the past nor the current future correctly+(Deutscher Bundestag, 2017; Heesen, 2017).

As the case of Exxon Mobil's publications shows, one has to assume that most climate contrarians are well aware of the threats we are facing and the unsustainability of the current situation (Supran & Oreskes, 2017). But despite the exact motives, connections and mechanisms behind these strong lobbies and power structures being unclear, generally the public, and particularly actors taking part in a dialogue surrounding the topic of climate change should be aware of their existence.

And whilst claims along the line of Donald Trump's, or the AfD's above mentioned one, are not entirely believed by a majority of the public, they are still effective at casting doubt and creating a sense of uncertainty that ultimately is enough to foster inaction amongst the general public and prevent effective and adequate climate policy from being seriously discussed and implemented (Dunlap & McCright, 2010). The underlying psychological and emotional mechanisms of denial and other %coping strategies+will be presented in the following chapter.

3.1.3 Coping with Climate Science

The prevailing facts and implications of climate change as presented by virtually all climate scientists and institutions such as the IPCC and others paint a grim picture of the future (Hamilton, 2011, p. 21; IPCC, 2014).

Understanding and %waking up+to these projected likely future scenarios is not easy rationally or emotionally. High energy future scenarios i.e. business as usual scenarios where energy use develops more or less as in the past are commonly associated with negative emotions

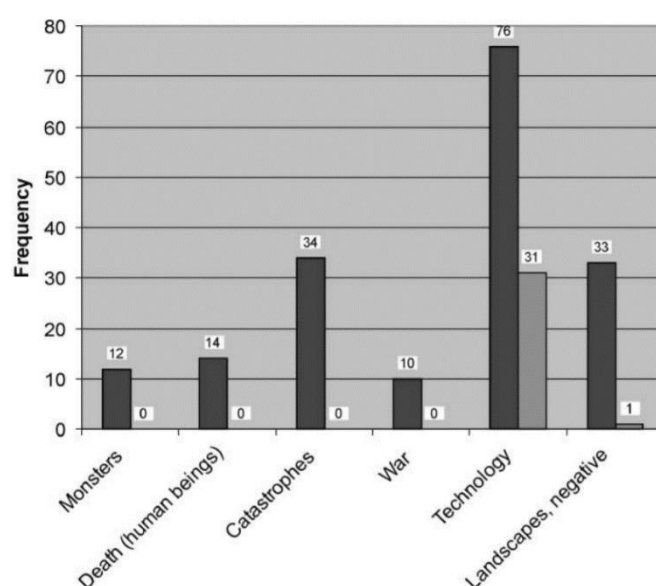


Figure 11: Frequencies of emotionally negatively charged images: low energy future (grey) and high-energy future (black) in Swiss integrated assessment (IA) focus groups (Stoll-Kleemann, O'Riordan, & Jaeger, 2001).

even without the explicit implication of possibly disastrous climate change (see Figure 5) (Stoll-Kleemann, O'Riordan, & Jaeger, 2001).

So the acceptance of the most likely future scenarios as presented by the scientific community, commonly implies a confrontation with a set of negative emotions, which need to be coped with (Hamilton & Kasser, 2009). Possible ways to deal with these arising emotions are called *coping strategies* by Hamilton and Kasser who have conducted extensive research on psychological adaption the threats and reasons to *why we resist the truth about climate change* (Hamilton & Kasser, 2009; Hamilton, 2010; Hamilton, 2011).

They group possible coping strategies into three types. They call them: *denial strategies*, which are aimed at suppressing anxiety and the associated inauspicious future prediction *by not allowing the facts to be accepted into the conscious mind*; *maladaptive coping strategies* which are *deployed to blunt the emotional impact of the facts about climate change* and *adaptive coping strategies* which are used *when the person accepts both the facts and the accompanying emotions, and then tries to act on the basis of both* (Hamilton & Kasser, 2009).

These coping strategies could be illustrated as follows:

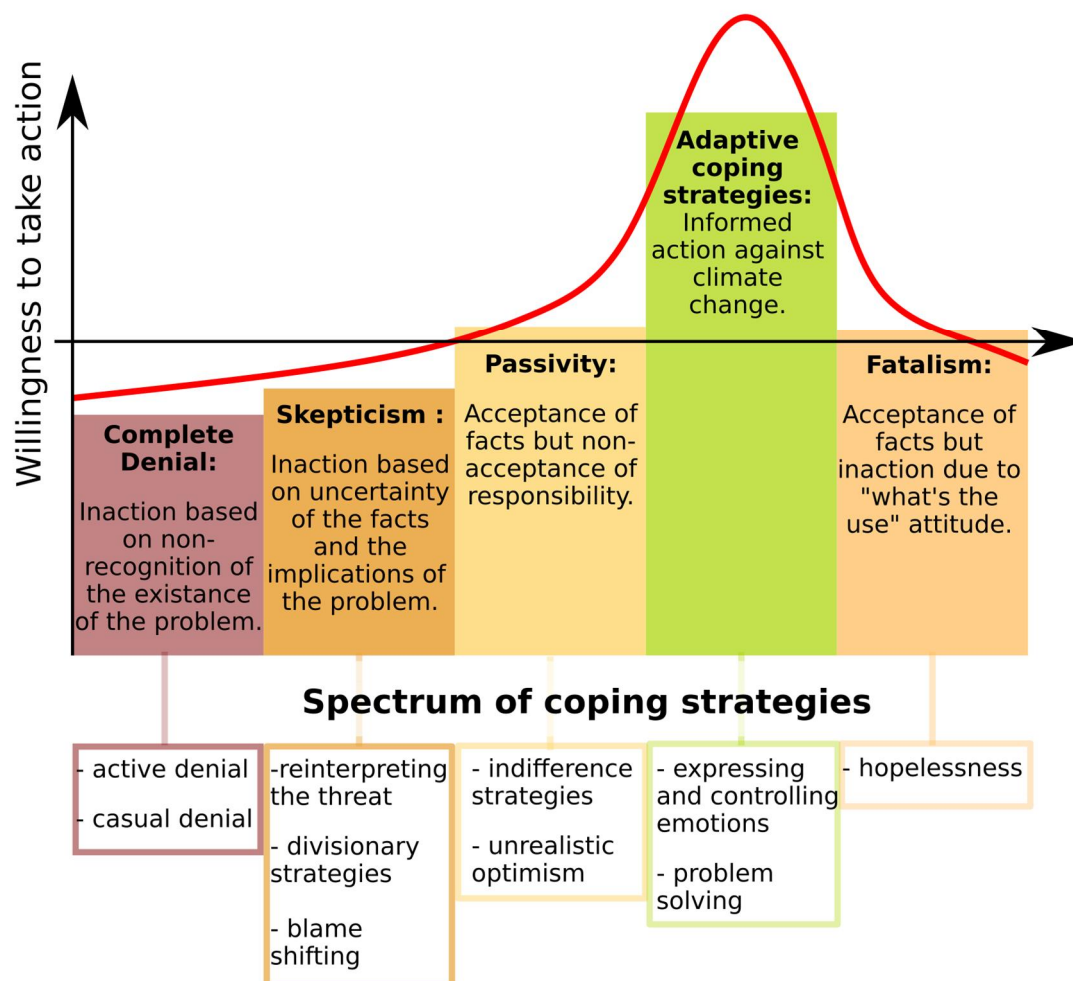


Figure 12: Mapping of the different coping strategies from complete denial to fatalism. Willingness to take action is none below the horizontal axis.

This attempt at mapping possible coping strategies aims at giving an overview of possibilities. The borders between the different strategies are diffuse and the different strategies are generally not deployed actively but rather manifest unconsciously. They can be inter-mingled, vary greatly over time and even adjust according to conversational partners depending on the current personal mindset (Hamilton & Kasser, 2009; Stoll-Kleemann, O'Riordan, & Jaeger, 2001). The specific strategies to the general denial, skepticism etc. will be elucidated in the following chapter.

All of the here outlined coping strategies have in common that they are aimed at mitigating the unpleasant emotions associated with waking up to the dangers of a warming planet (Hamilton & Kasser, 2009). The emotions associated with accepting the facts of climate science may include, fear, anxiety, guilt, anger, anguish, sadness, depression or helplessness. As mentioned in the introduction to this chapter, they arise from the grim future outlook described by climate scientist and have to be dealt with by anyone who seriously engages in a debate on our predicted future where, catastrophic climate change becomes a fact (Hamilton & Kasser, 2009). They therefore have important implications for a constructive dialogue on climate change and economic growth as they determine and help to explain the engaged actors perception of reality, sense of urgency and therefore also the willingness to possibly accept more drastic proposals in a discussion (Crompton & Kasser, 2009).

Thus, when asking for a fair and open, pragmatic and constructive dialogue on climate change and economic growth, an understanding and consideration of these coping strategies is crucial. Not only the concept of economic growth and the patterns and systems behind it are generally unclear, as shown in the previous chapter, the degree of acceptance of climate science itself is highly diverse and there is lots of confusion surrounding the topic due to the limited understanding of it (Hamilton & Kasser, 2009; Stoll-Kleemann, O'Riordan, & Jaeger, 2001; Lorenzoni & Pidgeon, 2006). Its perception therefore varies widely between regions, gender, level of education, race, political background etc. (McCright & Dunlap, 2011; Brody, Zahran, Vedlitz, & Grover, 2008; Flynn, Slovic, & Mertz, 1994). In this following section some of the most common maladaptive coping strategies, as illustrated in figure 6, and the possible arguments emerging from them will be outlined.

3.1.4 Maladaptive Coping Strategies

The underlying reasons for the wide spread denialism of climate sciences in its different forms and its psychological causes are manifold, complex and highly individual (Hamilton, 2010; Hamilton & Kasser, 2009; Stoll-Kleemann, O'Riordan, & Jaeger, 2001). Besides the perhaps most blatant form of climate change denial which is displayed by climate skeptics, who actively reject all or most of the main propositions established by climate science, there is also partial denial, or selective

denial of either facts and or emotions or other strategies that could be counted as denialism which are aimed at reducing the cognitive dissonance that arises from the acceptance of the facts of climate science without applying the full consequences to one's personal life and lifestyle (Hamilton & Kasser, 2009).

Stoll-Kleemann et al. (2001) highlight a number of socio-psychological denial mechanisms, as they call them, which have heightened the cost of shifting away from comfortable lifestyles, set blame on the inaction of others, including governments, and emphasized doubts regarding the immediacy of personal action when the effects of climate change seemed uncertain and far away. The focus groups in the study cast doubt and questioned specialists as to their accuracy and meaning. Aligning with other studies, they argue that the main reason for denial strategies is to maintain consistency and avoid cognitive dissonance. They cite studies that show that it is very much a majority of Europeans that are concerned and often even saw climate change as very frightening, but for various reasons as described below fail to take appropriate mitigating action.

One area of inconsistency analyzed here lies in the possible disjunction between a personal preference for a particular lifestyle, consumption habit, or behavioral choice and the need to respond effectively to climate change mitigation strategies. In short, people may profess anxiety over climate change, but be faced with internal resentment or even denial over what they cannot accept as a justifiable change in behavior (e.g. to travel by public transport, ride a bike in the rain or invest in high cost domestic insulation). (Stoll-Kleemann, O'Riordan, & Jaeger, 2001)

They make out the following nine forms of denial frequently expressed:

- metaphor of displaced commitment -> *I protect the environment in other ways*
- to condemn the accuser -> *You have no right to challenge me*
- denial of responsibility -> *I am not the main cause of this problem*
- rejection of blame -> *I have done nothing so wrong as to be destructive*
- ignorance -> *I simply don't know the consequences of my actions*
- powerlessness -> *I am only an infinitesimal being in the order of things*
- fabricated constraints -> *There are too many impediments*
- After the flood -> *What is the future doing for me?*
- comfort -> *It is too difficult for me* (Stoll-Kleemann, O'Riordan, & Jaeger, 2001)

Hamilton and Krasser (2009) come up with similar observations. They make examples of common statements expressing straight-forward denial as *scientists are often wrong*, *they can't make up their minds* or *they are exaggerating*. Further they identify a set of maladaptive coping strategies:

For those who do not reject the scientific warnings, various coping strategies help to manage the unpleasant emotions associated with the recognition that the world is expected to be less amenable to human well-being and survival. As opposed to their suggested adaptive coping strategies, all maladaptive coping strategies have in common that they are likely to worsen the environmental (and social cultural) situation and lead to rejection of environmental mitigation strategies or even enhancing of negative environmental behaviors (Hamilton & Kasser, 2009).

These different forms of denialism or maladaptive coping strategies, which lead to inaction (see figure 6) will be outlined in this following chapter:

-Active Denial

Complete and active denial leads to avoidance of negative emotions implied by accepting the facts on climate change. As mentioned, this helps solving the cognitive dissonance arising from the acceptance of facts contradicting one's personal worldviews and future perspectives. Full denial or rejection of scientific claims resolves the dissonance, and thus removes the unpleasant feeling. (Hamilton & Kasser, 2009).

-Casual denial

A more casual form of personal denial is described by Hamilton as, restricting exposure to distressing information, skipping news stories about climate change or avoiding taking part in conversations and debates on the issue (Crompton & Kasser, 2009). Discrediting scientists and scientific research can also bring the desired effect of reducing anxiety and may also be considered a denial strategy.

-Reinterpreting the threat

Common forms of that strategy include, de-problematizing in the form of downplaying the threats or distancing in time or space. Both strategies in some ways consist of comforting oneself e.g. 'It's not that big a deal, we've overcome bigger threats' or 'I'm sure we'll be fine for another 50 years. When the time is right we'll find solutions'.

-Diversionary strategies

Diversionary strategies are described as aiming to divert attention from anxious thoughts and unpleasant emotions. This is commonly achieved by pleasure seeking i.e. simply distracting oneself by engaging in joyful activities (e.g. pursuit of exciting experiences, new acquisitions or use of substances) or by engaging in minor behavioral changes that can help install a feeling of satisfaction and relieving the feelings of guilt or helplessness (Hamilton & Kasser, 2010).

Pleasure seeking as means to escape from reality most often brings with it direct adverse effects to the environment caused by increased consumption. The overall effect of engaging in minor

environmental behavior, which can be observed throughout society when people buy carbon offsets for their flights or engage in one meatless meal per week, in contrast is not as clear. It might have direct positive effects, but can also serve as a form of absolution that relieves people of the need to engage in the more radical political and lifestyle changes that are ultimately necessary (Hamilton & Kasser, 2009). In addition such personal sufficiency efforts might also be subject to direct or indirect rebound effects as described by Alcott (2010).

Steven Sorrell writes in that regard:

But to move the sufficiency ethic from the marginal to the mainstream is likely to require collectively agreed objectives, priorities, procedures and constraints that are institutionalized through government action in some form. This means that the most important agent of change is likely to be individuals acting as citizens in the political process rather than as downshifting consumers. - (Sorrell, 2010)

Or Chris Hedges similarly notes:

We can save groves of trees, protect endangered species, and clean up rivers, all of which is good, but to leave the corporations unchallenged would mean our efforts would be wasted. These personal adjustments and environmental crusades can too easily become badges of moral purity, excuses for inaction. They can absolve us from the harder task of confronting the power of corporations - (Hedges, 2010, p. 293 found in Jucker, 2014, p. 68)

The same idea of minor behavioral changes is represented in the above list of Stoll-Kleemann et al. (2001) study as metaphor of misplaced commitment. According to them, such minor behavioral changes help defend against feelings of helplessness.

However, such minor behavioral changes can also be linked to the term green consumerism which has often been shown to have trifling if not adverse effect on the environment as energy efficiency gains can have various rebound or even backfire effects (Sorrell S. , 2007; Sorrell S. , 2010) (Taylor, Blattenberger, & Verleger, 1977) (Waechter, Sütterlin, & Siegrist, 2015) (Moser, Rösch, & Stauffacher, 2015). Green consumerism is susceptible to backfire effects as it is often expressed through engaging in symbolically significant behavior e.g. buying a hybrid vehicle which then might free the owner from having to take other environmental action or justify driving longer distances (Sütterlin & Siegrist, 2014). Such symbolically significant behavior is often directly compensated by other behavior which has adverse environmental effects (Sütterlin & Siegrist, 2014). A study by Mazar & Zhong (2010) even shows that people act less altruistically and are

more likely to cheat and steal after purchasing green products+than after purchasing conventional products+.

Examples of arguments formed from that mindset of green consumerism might be, %I bought organic food all year, therefore it should be ok to drive a big car.+or %I don't eat meat, therefore it is ok for me to fly to Bali for vacation+.

-Blame shifting

Blame shifting is another common strategy often engaged in by individuals in private conversations to high rank officials and members of state not only in regards to climate change policies (Washington, 2013; Mortensen, 2012; Rijpma, 2010; Hamilton & Kasser, 2009).

The underlying psychology is denial of guilt and handing over of responsibility to others. It is represented in the above list as %denial of guilt+, %rejection of blame+and %comfort+(Stoll-Kleemann, O'Riordan, & Jaeger, 2001).

Possible argument as suggested by Hamilton and Kasser (2009) include:

%It's not my fault because my country is small+, %My carbon footprint is smaller than others+or %China builds a new coal-fired power plant every week+and is now %the world's biggest carbon emitter+.

They make the fallacies in such argumentation clear by humorously suggesting: %In small, rich countries this coping approach is akin to a shoplifter absolving himself because someone else robbed a bank; in large, rich countries it is akin to a bank robber absolving himself because someone else shoplifted (Hamilton & Kasser, 2009)+.

-Indifference strategies

Strategies of indifference are used to disengage with the feeling arising from %caring+about climate change. Especially taking into consideration the asperity of projected outlooks, similarly to denial, indifference helps to prevent the anxiety and distress caused by accepting and caring about the future. As do the other described strategies, indifference also induces passivity. Indifference may also be a sign of resignation (in the face of help- / or hopelessness) and occur in combination with other strategies like denial, %I don't know and I don't care+.

-Unrealistic optimism

Unrealistic optimism or wishful thinking, is the last maladaptive coping strategy described by Hamilton and Krasser (2009). It manifests in believing in, and expressing unrealistically optimistic future scenarios. It might include the hope for technological innovation to solve climate related problems or the hope %that everything was not that bad after all+. Hamilton and Krasser (2009) describe such wishful thinking as %benign fiction+. They cite Martin Seligman %an advocate of

learned optimism+who recognizes that %cultivating optimism is helpful only when the future can be changed by positive thinking; when that is not the case %we must have the courage to endure pessimism (Seligman, 1991, p. 292).+

3.2 Helplessness, or who is Responsible?

The question that arises from looking at all of the possible ways to %maladaptively+cope with climate science as described in the previous chapter is then: how to do so adaptively?

Sustainable consumerism which goes beyond %green consumerism+as described by Akenji (2014) seems a good solution to start with. By taking action and reducing environmentally adverse behavior, the cognitive dissonance describe in the above chapter can be dissolved. But a sort of feeling of helplessness might prevail. Especially when isolated in ones efforts, downshifting personal consumption to a sustainable level under current structures is difficult and even if successful, apparently is not enough (Lorenzoni & Pidgeon, 2006; Akenji, 2014). So if green consumerism or even fully sustainable consumerism on a personal level is not a sufficient measure as shown under the previous chapter who can one turn to?

%No single actor or governance model has the capacity to tackle global issues such as growing resource use or climate change. In a globalized economy, managing and monitoring natural resources in a sustainable manner must happen at different scales, from local, regional, national to global (Schanes, Jäger, & Drummond, 2018).+

Loernzoni & Pidgeon (2006) investigated the perceived responsibility for- and trusts in different actors as seen by the German and British Public. Their results show that most people see the industry and politicians designated the highest responsibility with 50% of the questioned in the German region subject to the study. Further 42% saw responsibility lying with scientists, 27.8% stated that individuals were responsible, 23.7% maintained that environmental agencies were responsible and 3.3% assigned responsibility to the media (Lorenzoni & Pidgeon, 2006).

In line with the projected responsibility, 60% of 1007 UK citizens %elt that climate change would be best addressed at a global level+. Only 13% where of the opinion that national governments would best tackle the issues, and 9% felt that it would be best if individual households did so.

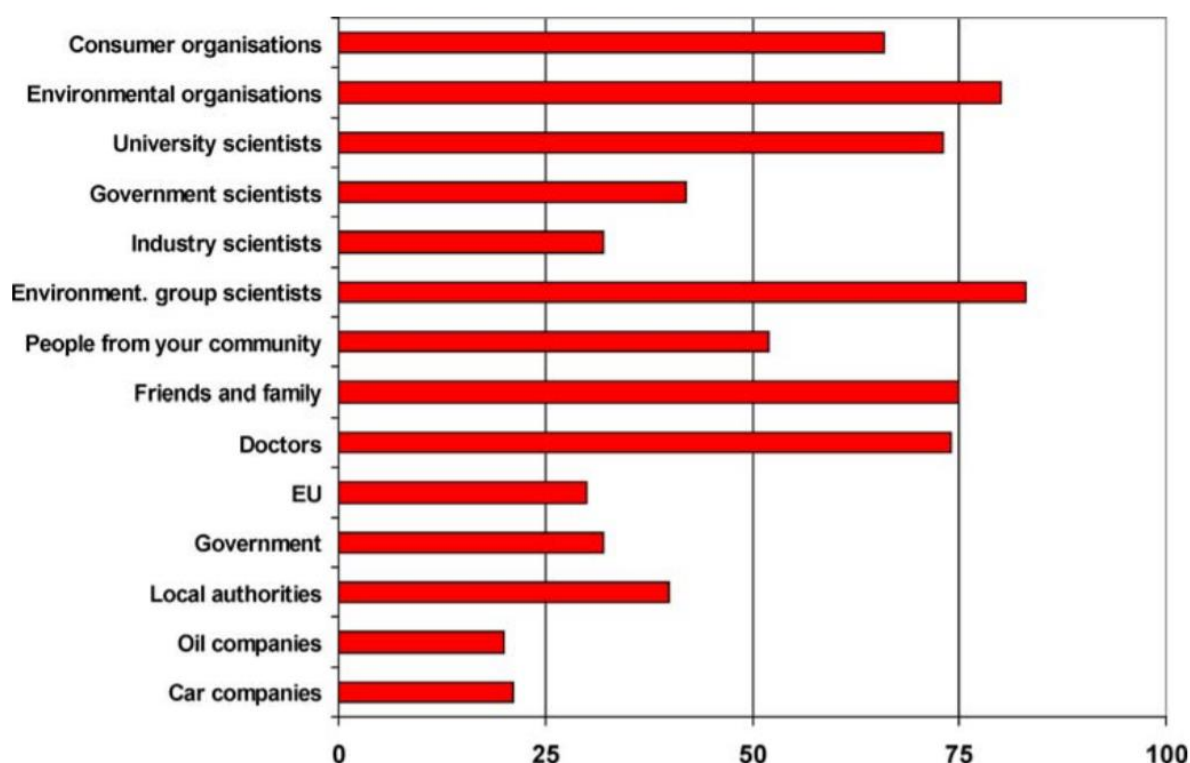


Figure 13: Percentage of British respondents who would trust a lot/a little the above organizations/people to tell the truth about climate change, represented as percentages of valid responses (N = 1547) (Lorenzoni & Pidgeon (2006) with data from Poortinga (2003)).

In a similar study, trust in the very actors most commonly assigned the responsibility of solving climate change related problems is particularly low. Government and Industry (In this case oil and car companies) are only trusted by around 20% of the 1547 citizens interviewed whilst friends and family and environmental organizations and scientists receive trust by around 70%.

As shown in the chapter *Lobbies and current money and power structures*, such mistrust in government and government agency to take adequate action on climate change is not completely unreasonable. And hopes that the industry will self-regulate under the current economic system evidently seem illusionary. Scientists and environmental agencies which are seen responsible by 42% respectively 23.7%, seem to be lacking of institutional power. Efforts by scientists to try and raise awareness and even propose *mitigation pathways* as in the IPCC reports *summary for policy makers* are extensive and honorable, but seemingly ineffective on broader institutional and political levels (IPCC, 2014). The difficulties with individual responsibility as named by 27.8% have already been outlined and holding the media responsible, as the remaining 3.3% suggested proves to be difficult for many reasons which exceed the scope of this thesis.

Corporate media and PR are part of the strategy of those in power to retain power at all costs, to spread the ideology that their interests are the interests of

all in society, and to hide the fact that this is ideology rather than an accurate description of the facts.+ (Jucker, 2014, p. 50)

In conclusion it could be stated, that the actors most commonly ascribed responsibility to tackle climate change are also the ones with most power to do so. However, politicians and governments are also shown to be exposed to extensive lobby efforts and are shown in many studies to be representing the powerful elites rather than the common interests (Gössling & Cohen, 2014).

%Multivariate analysis indicates that economic elites and organized groups representing business interests have substantial independent impacts on U.S. government policy, while average citizens and mass-based interest groups have little or no independent influence.+ (Gilens & Page, 2014)

Further the actors most motivated to take and encourage action are generally lacking the political power to have meaningful mitigation policies implemented. This described situation can cause frustration and a sense of disempowerment with people trying to engage in action and ultimately may lead to feelings of hopelessness (Lorenzoni & Pidgeon, 2006).

%Personal action was seen to be pointless in isolation; a responsible government was called for to lay the foundations to meet the collective interests of society through policy and by enabling individual duties. Yet political institutions were said to be absolving themselves of that role and responsibility. The widely observed public ambivalence towards climate change may well reflect an expression of frustration fueled by disempowerment.+ (Lorenzoni & Pidgeon, 2006)

3.3 Hopelessness

%Over the last five years, almost every advance in climate science has painted a more disturbing picture of the future. The reluctant conclusion of the most eminent climate scientists is that the world is now on a path to a very unpleasant future and it is too late to stop it. Behind the facade of scientific detachment, the climate scientists themselves now evince a mood of barely suppressed panic. No one is willing to say publicly what the climate science is telling us: that we can no longer prevent global warming that will this century bring about a radically transformed world that is much more hostile to the survival and flourishing of life. As I will show, this is no longer an expectation of what might happen if we do not act soon; this

will happen, even if the most optimistic assessment of how the world might respond to the climate disruption is validated.+ (Hamilton, 2010)

Regarding such statements, the overall predictions of contemporary climate science and the difficulties described in the previous chapter together with the lacking of clear responsibilities or any real strategies to avoid at least the worst prediction scenarios, maintaining hope can be a difficult task (Meadows, Randers, & Meadows, 2004; Hamilton, 2010; Crompton & Kasser, 2009). Resorting to fatalism and hopelessness becomes a real danger.

However, similarly as with hope, there might be two kinds of hopelessness. Ojala (2012) highlights two different types of hope: %constructive hope+which encourages pro-environmental behavior, and %hope based on denialism+the same might be argued about hopelessness. There could be hopelessness which is similar to fatalism or even predeterminism which encourages passive behavior, but there might also be a form of hopelessness, which could be considered realism as to accepting that adverse effects are determined and unavoidable and need to be dealt with in the best way possible. In that sense, hopelessness as a conclusive presumption that we will experience adverse environmental impacts over the course of the next decades, and that the necessary changes needed will likely not be implemented in time to mitigate them, does not necessarily mean the end of the world and does not have to imply total apocalypse nor an apocalyptic outlook on live and the future.

Although initially it might be difficult to find motivation to engage in pro-environmental behavior or even political action, in the face of feeling a certain hopelessness, it is for most impossible to avoid those occasional feelings and they might have to be allowed as Hamilton and Krasser (2009) suggest:

%The purpose of emotion-focused coping is to allow these deep feelings of anger, depression and despair to be expressed.+ (Hamilton & Kasser, 2009)

However remaining under the stress of these emotions indefinitely may lead to resignation and apathy. The goal must be to %transcend the emotions by engaging in them+. Cultivation of mindfulness through meditation practices or a general mindful observation of ones feelings in order to reach a detached state of awareness of ones emotions in many studies has shown to be beneficial (Brown & Kasser, 2005; Delmonte, 1985; Sears & Kraus, 2009). Meditation practices that specifically cultivate mindfulness and loving kindness have been shown to reduce anxiety and other negative emotions and even increased hope in young adults. Besides that, meditation as common in Buddhist practices have been shown to have various other mental and physical health benefits and are advisable to anyone looking to improve their overall health and to cultivate a positive, compassionate and loving overall mindset (Davidson, et al., 2003; Lutz, Johnstone, & Davidson, 2008; Newberg et al., 2010).

3.4 The Taboo of Questioning Growth

Apart from many people still being in denial about the science of climate change all together (see chapter 3.2.1), there is a broad consensus amongst the scientific community that climate change is real and man-made, and drastic measure need to be undertaken in order to avoid at least the worst scenarios for the future. Strong evidence suggests that energy efficiency increase and technological advances will be inadequate measures if we are to meet any set climate goals. Measures that deal with affluence and our consumption levels are thus inevitable as shown in the introduction (chapter 1.1 and 1.2) and analyzed in depth in the pre-studies to this thesis (Kretz, 2017).

But in times where sustainable development as a concept has made its way into governments, businesses, public and private institutions and private households around the globe and Corporate Social Responsibility guidelines are not the exception but the rule for international businesses, continuous economic growth as an essential counter-component to sustainable development is still rarely talked about (Kallio, 2007; Gössling & Cohen, 2014). It can be considered a taboo.

Taboo: 1, a religious custom that forbids people to touch, say, or do something, because they believe that they will be punished by God or the gods.¶

2, a social custom that certain words, subjects, or actions must be avoided because people think they are embarrassing or offensive.¶

A social or religious custom prohibiting or restricting a particular practice or forbidding association with a particular person, place, or thing (Pearsall & Hanks, 1998).

The word ~~taboo~~ is derived from the Polynesian term ~~tabu~~ which indicates something that is forbidden or prohibited (Tetlock, 2003). Questioning or ~~touching~~ a taboo is likely to lead to moral outrage and is perceived to be embarrassing or offensive (Kallio, 2007; Gössling & Cohen, 2014). Also, a taboo represents something that is explicitly true and real, at least for many people, but is veiled under rhetoric and publicly silenced. Taboos are in many ways the opposite of rhetoric. Kallio (2007) suggests, that while rhetoric is a phrase or idea that is used excessively because it implies something desirable and commonly accepted, the very opposite is the case for a taboo. A Taboo is generally avoided and represents a forbidden idea. Forbidden not by law but by cultural norm (Kallio, 2007).

Questioning economic growth seems to fulfill all the above mentioned criteria of a being a taboo. It is generally avoided by those in power or public and appears to be the elephant in the room when it comes to climate mitigation strategies (Gössling & Cohen, 2014; Kallio, 2007). When looking at the failure of contemporary climate mitigation strategies (which rely almost exclusively on technical innovation and increased efficiency) to produce the desirable and necessary reduction needed, raising the question of economic or population growth seems obvious (Liisa & Tapio, 2016; Hardin, 1995, p. 3).

It is in essence an undisputable fact that population growth together with growth in consumption creates a formula that is not only the seed of most environmental problems, but also an absolutely impossible long-term trend in a finite system+ (Kallio, 2007)

Though it seems that many scholars in the field are aware of the taboo specifically on this issue, it is surprising how little coverage the topic gets in academic and public debate (Fournier, 2008). Kallio (2007) recognizes, "The impossibility of continuous economic growth, for its part, has been almost silenced to death by politicians and business advocates, as well as by scholars close to corporate interests.+He also notices that whilst "CEOs are in a sense constrained to remain silent on some issues, it is highly problematic, due to the very nature of science, if scholars also silence such issues+(Kallio, 2007).

Politicians, scholars or practitioners, when daring to openly question or even just discuss economic growth critically, jeopardize their position, risk becoming embroiled in problematic situations, face public ridicule and condemnation and in end effect risk their livelihood and jobs by it (Kallio, 2007). This is coherent with the statements made by the Swiss Green Party politician Daniel Heierli who was interviewed in pre Studies to this thesis, and noted, "when merely questioning economic growth in debates one / or ones (political) party is immediately ridiculed and accused of wanting everyone to go back into caves to live.+

Much like with other forms of personalized political resistance, activists and transgressors who break growth taboos face many forms of resistance.

This is highly problematic and has to be looked at as one major reason why there is virtually no political or public debate on the topic. Amongst politicians and business leaders this is in part explicable through the influence of lobbies and current power structures (see chapter 3.1.2)

These structures encourage denial and are at the forefront of maintaining the taboo, by ridiculing any suggestion that leads in the direction of restricting the free market with regulations or taxes or even going as far as to question growth.

Similarly as shown with denial however, the tabooization of questioning growth goes much deeper in society than can be explained purely by the influence of power structures. Questioning economic growth is much more than simply questioning an abstract model of economics or way of financial organization (e.g. fractional reserve bank system). In many ways it implies questioning our western way of life or what Ulrich Brand calls *the imperial way of (production and) life* (Brand & Wissen, 2017). This can give rise to uncomfortable feelings (to the person feeling challenged) that arise from the cognitive dissonance / feeling inconsistent. Therefore the questioned might feel his self-identity threatened or at least challenged (Stoll-Kleemann, O'Riordan, & Jaeger, 2001). As described in the chapter 3.1.3 feelings such as fear, anxiety, guilt, anger, anguish, sadness, depression or helplessness might arise and could be projected upon the person questioning growth and therefore everything connected to it (Stoll-Kleemann, O'Riordan, & Jaeger, 2001; Hamilton & Kasser, 2009).

Schumacher put it nicely in his *Small is Beautiful* when he wrote:

In the current vocabulary of condemnation there are few words as final and conclusive as the word "uneconomic". If an activity has been branded as "uneconomic", its right to existence is not merely questioned but energetically denied. Anything that is found to be an impediment to economic growth is a shameful thing, and if people cling to it, they are thought of as either saboteurs or fools. Call a thing immoral or ugly, soul-destroying or a degradation of man, a peril to the peace of the world or to the wellbeing of future generations; as long as you have not shown it to be "uneconomic" you have not really questioned its right to exist, grow and prosper. (Schumacher, 1973, p. 39)

Garett Harding (1995) calls the believe in growth and progress a new religion, *The marvels of technology have brought many people to an uncritical worship of a god called "progress" which is sometimes equated with perpetual growth*. Indeed he is not the only one who has compared our belief in capitalism, growth and *the market* to a religion (Baecker, et al., 2008; Deutschmann, 2001). In that sense, questioning *the markets* can be considered blasphemy. Herman Daly (2012) writes in an essay on his webpage:

There are two dogmas that neoclassical economists must never publicly doubt lest they be defrocked by their professional priesthood: first, that growth in GDP is always good and is the solution to most problems; second, that free international trade is mutually beneficial thanks to the growth-promoting principle of comparative advantage. (Daly, 2012).

Indeed the reactions to transgressors who publicly violate taboos are typically ones of moral outrage, anger or disgust (Gössling & Cohen, 2014; Tetlock, 2003). A pragmatic dialogue is often impossible and rational arguments are unwanted. Growth has become an end in itself, as we seemingly have completely lost track of what it was intended for in the first place, and stubbornly maintain our putative dependence on it, repeating the growth rhetoric without calling into question its dogma (Kallio, 2007; Dilworth, 2010).

The notion that economic growth stands for and is equivalent to development and prosperity and therefore is inherently good, is deeply rooted in society. The idea that growth at some point in time could cause more harm than good is simply disregarded, let alone the fact that infinite growth on a finite planet is an absolute impossibility (unless we are going to successfully colonize other planets in space, which doesn't appear very likely as Hardin (1995) entertainingly describes in chapter two of his *Living within limits*). So the question can hardly be whether economic and population growth need to be questions at all, the question can only be when and under what circumstances will growth be discussed. According to scientists around the world, we barely retain a position in which it is still possible to make changes before irreparable damage is caused, eliciting the question to which degree our reform will be by design or disaster (IPCC, Climate Change 2014: Synthesis Report, 2014; Meadows, Randers, & Meadows, 2004).

3.5 A Large Opinion Gap

Another difficulty which in general makes a debate on climate change and growth difficult are the vastly different standpoints that are taken on the issue. With parts of society in complete denial not seeing any problem in the first place and concerned citizens demanding complete transformation of our economic system and society in the face of the threats of climate change. It seems that the climate change convinced and the climate change skeptics are engaging in different debates on the same issue with the former focusing on solutions and the latter questioning the source of the problem. The discussion has reached levels of polarization where an inclusive and meaningful dialogue with a focus on solving problems has become unlikely and debates too often are focused on demonizing the other side and pursuing its own goals (Hoffman, 2011).

In public debates often times, convincing strategies or persuasive strategies are used to enforce respective opinions. The sole purpose of such strategies is to convince the audience and since the audience is often made up of laymen, the arguments need to be legitimate and plausible in a common sense. Scientific evidence can be disputed by natural evidence (Bizzozero, 2014). An extreme example of such strategies was given by US Senator Jim Inhofe when he brought a snowball from outside the Capitol onto the senate floor in February 2015 to prove his point that it was unseasonably cold and therefore global warming could not be real (The Washington Post, 2015).

Retreat into rhetoric based on generally accepted values such as freedom, equality or justice in order to formulate attacks on the opposition as a form of skandalising the opponents position is also common for such strategies. They can also enforce and utilise social taboos as described in the above chapter, which also rely on such rhetoric and cause moral outrage and shaming towards the transgressor of the taboo (Hoffman, 2011).

But even amongst climate change convinced the opinions on the necessity for drastic action vary widely:

There is a fundamental divide between the supporters of the status quo and a transformation in their concept of and approach to sustainable development. The status quo approach sees change through management, top down and incremental, of the existing structures of decision-making. The transformation view is that change will be mainly through political action working both in and outside the existing structures. The sustainable development discourse at present is dominated by the managerial outlook. (Hopwood, Mellor, & O'Brien, 2005)

This makes it highly difficult to find a common ground to start a broader and inclusive dialogue on.

3.6 List of Arguments

Apart from the above mentioned difficulties for a constructive dialogue, there are different arguments commonly used in debates which are not directly attributed to any of the difficulties described above. They are listed and shortly discussed in this following chapter. The arguments listed were gathered from personal experience, literature research and formal or informal interviews with people already engaging in a debate on growth.

(Where no sources are provided the Sufficiency Standpoint is based on my personal opinion.)

<u>Argument</u>	<u>Argument Logic</u>	<u>Sufficiency Standpoint</u>
"Growth has made for all past progress, we would still have a life expectancy of 30 years if not for growth based capitalism!"	besides the point	This argument is beside the point: It was never an argument that growth based capitalism was always illegitimate. The question is, is it still the best option for the future of industrialized countries? With an ever growing inequality of wealth distribution, the vast destruction of ecosystems worldwide and especially the threats of climate change, this should at least be up for discussion.
"If there is no growth there will be no progress!"	misleading assumption	There is no evidence that supports this claim, although it is often repeated. Supporters of ongoing economic growth like to reference times before industrialization and argue that without growth "we're going back into caves to live". There is no evidence that innovators, inventors and scientists would "lay down work" if not for growth (Schneider et al., 2010). The opposite might be the case, with a changing system fostering new ideas.
"Growth helps people out of poverty and therefore needs to be maintained."	besides the point	Supporters of sufficiency do not commonly argue categorically against growth for all cases (Haapanen & Tapio, 2016). To reach an equal global state, industrialized countries need to allow developing countries to reach their standard, and should not take the authority to allow or not allow them to grow. Further, despite approximately 400 years of western capitalism and many atrocities committed in its name, approx. 800 million still currently suffer from chronic undernourishment etc. Fairness or benevolence should not count as an argument for promoting modern neoliberal capitalism.
"Growth protects us from unemployment."	misleading assumption	It is clear that reducing dependency on growth would have to be enabled through- or accompanied by- a whole array of policy measures which deal with social issues from their roots. Currently the West seems to blindly chase after growth in order to maintain the illusion of a well-working system, while simultaneously avoiding solving any issues. Good examples of issues currently covered up with growth rhetoric in Europe or Switzerland in particular include unemployment, and health care or pension schemes (AHV). Continuing to follow the destructive path of growth is one that makes the people pawns in the systems game instead of visa versa.

<i>%There is a need for coordinated action. If we act in isolation this will have devastating consequences for our prosperity.+</i>	<i>Tragedy of the Commons</i>	This is the classic "Tragedy of the Commons". There is no easy counter-argument to this that is not based on morals. One can only emphasize the dangers of inaction, our heightened responsibility as a part of the "global north" or the potential for a better life with less (Schneider, 2010).
<i>%Why should we or I abstain from anything? If we give up our position in the world someone else will take it.+</i>	<i>Survival of the fittest / Lifeboat ethics / Argument of egoism or nationalism</i>	Similarly to the above argument, this is mainly a question of morals. This position raises the serious question of whether a majority would vote for global social justice at the cost of an affluent lifestyle or follow the cynical argumentation of Hardin (1974) in his "Lifeboat ethics".
<i>%What are the alternatives?+</i>	<i>fatalism</i>	This question is commonly brought up. It is a legitimate question but it is not reasonable to expect a conclusive answer from someone asking for dialogue on the issue. Finding and showing alternatives is part of the goal of a dialogue. One response is that currently, small-scale community based solutions (as presented in Chapter 5.7) seem to offer the best platform for engagement.

Table 2: List of arguments commonly used in a discussion surrounding sufficiency and growth, the logic behind them and the corresponding sufficiency standpoint.

4 Panel Discussion: Infinite Economic Growth on a Finite Planet

While the rest of this thesis focuses on difficulties and the opportunities of an open public dialogue amongst all members and representatives of society, the following panel discussion functions as one representative occurrence of a dialogue (or debate in this case) within, and as part of such general public dialogue which could take place throughout society.

The panel discussion was held in the course of the Nachhaltigkeitswochen at the (UZH) in 2016. It was held under the name *Infinite Economic Growth on a Finite Planet* (*Unendliches Wirtschaftswachstum auf einem endlichen Planeten*).

The panel members were chosen by the organizers of the Nachhaltigkeitswochen to represent different sides of the debate. They consist of:

- Dr. Mathias Schmelzer (UZH)

Dr. Schmelzer can be considered a *growth critic*. He was long a part of the ATTAC (association pour une taxation des transactions financières pour l'aide aux citoyens) which considers itself as part of the anti-globalization movement and generally criticizes the neoliberal ideology and challenges the paradigm of growth. He wrote a number of books and articles. His most recent book, published in 2016 carries the name: *The Hegemony of Growth: The OECD and the Making of the Economic Growth Paradigm*, which deals critically with the paradigm of growth and calls for alternatives (Schmelzer, 2016).

- Prof. Dr. Irmie Seidl (Head of the research department *Wirtschafts- und Sozialwissenschaft* at the Eidgenössische Forschungsanstalt WSL)

Prof. Dr. Seidl is the head of the research department *Wirtschafts- und Sozialwissenschaft* at the Eidgenössische Forschungsanstalt WSL in Birmensdorf and taught *ecological economics* at different universities including the UZH and ETH in Zürich. She could generally also be considered a *growth critic*. In one of her more recent publications from 2016 she poses the question in the title *Warum (nicht) Wachsen?* (*Why (not to) Grow?*). On her webpage of the WSA she states her research interests as *Nature conservation and biodiversity*, *Environmental economic instruments* and *Post-growth-society* amongst others (Seidl & Zahrt, 2016).

Prof. Dr. Lucas Bretschger (Professor for economy and resource economy at the eth)

Prof. Dr. Lucas Bretschger is currently employed at the Department of Management, Technology and economy at the Eidgenössische Technische Hochschule (ETH) in Zürich. He seems to be a supporter of the idea of *qualitative* or *immaterial growth* although his position is not as clear as

with to other panel members. He states his research interests as %Dynamics of natural resource use+, %Climate economics and policy+, %Environmental pollution and growth+, %Sustainable development+and %Endogenous growth, trade, and regional economics+.

In his book %Greening Economy and Greying Society+he argues that %economy and ecology can be compatible, provided that the crucial ecological conditions and restrictions are well respected by the economy and growth is based on non-material factors such as technologies and human skills.+ Page 73. %The answer to the question of whether we can grow forever on a finite planet crucially depends on the question of what can grow in the long run.+(Bretschger, 2015)+

Prof. Dr. Rudolf Minsch (chief economist and Head of general economic policy and education at Economiesuisse)

Prof. Dr. Rudolf Minsch is the chief economist of the Swiss corporate union Economiesuisse which represents approximately 100000 Swiss corporations and businesses. They support economic growth and privatization and can generally be considered market liberals who seek more free trade, lower government taxes and less government regulations and restrictions in general.

The panel was moderated by Sandro Brotz a Swiss journalist and TV host that usually presents the show %Rundschau+which is aired on the Swiss national television station SRF.

4.1 Method

The recorded panel discussion was chosen as a representative example of a debate held on the topic. With the choice of the panel members the goal of the organizers of the event was to include academic representatives from all backgrounds and sides of the discussion.

After getting permission from the organizers of the Nachhaltigkeitswochen to use the Video recorded in 2016, the panel discussion was transcribed in the original language German (see appendix 1). Additionally all the main talking points from each panel member were summarized and translated into English in order to obtain a better overview of the interview.

The panel members' backgrounds and published work were researched and consulted in order to acquire a better understanding of their engagement and viewpoint (summarized and were presented in the introduction to this chapter.)

The transcribed interview was then systematically analyzed for arguments and standpoints which might reflect the dialogue difficulties as described in chapter 3. Specific argument were picked out

as quotes to highlight the points made in the discussion. Further, overall difficulties and challenges were analyzed. The Results will be presented in the following chapters.

(Any quotes used are freely translated from the German transcript into English by the author of this thesis on my own account.)

(Titles such as Mr. or Ms. will be left out in the following for reasons of simplicity.)

4.2 Panel Discussion Summary

The discussion is an hour and two minutes long. Talking time was about equally spread amongst all four panel members with Schmelzer getting marginally less talking time than the others.

Overall it could be summarized that (as maybe typical for such short debates held in front of an audience without the clear goal of reaching a consensus) no real concessions were made and generally the panel members kept their standpoints throughout the debate. The participants generally represented their standpoints firmly and resisted contrary arguments or altering evidence from other panel members.

Schmelzer and Seidl agreed on many talking points and clearly dispute the idea of %infinite economic growth on a finite planet+as posed in the title of the panel discussion. Minsch takes the overall contrary standpoint and is in favor of economic growth while Bretschger is not to be positioned clearly from this debate.

In the following sections, a brief summary of the main questions and talking points of the panel discussion are presented (for the full transcription of the panel discussion see Appendix A):

4.2.1 Economy without Growth

The first main question posed to the panel members was, %can an economy work without growth?+ Bretschger who answered first is of the opinion that it can. The question for him is just %we (the civil society) want that+. He also emphasizes that in his opinion, education can also be a form of growth and the general population needs to decide what form of growth they want, and if they want growth at all.

Seidl and Schmelzer agree that an economy without growth is not only possible, but will be a necessity in the future, since growth will not be maintainable at the current rate. In fact growth is already stagnating in some sectors Seidl points out. Schmelzer opposes Bretschger's idea that the form of growth can be changed that easily and emphasizes that the economy worked completely without growth until 250 years ago at which point fossil fuels made it possible to grow at unprecedented rates.

Jucker answers with a metaphor on how growth is necessary to fight unemployment and emphasizes that growth is inherently good. He specifically points out to the audience that they would not be sitting there if not for the growth in the past decades.

Seidl agrees that growth in the past correlated with increased wellbeing but stresses that in the last two decades, this correlation no longer exists in western countries. She also emphasizes that: *the situation in developing countries is a different one*. She agrees that within the current economic system, growth is necessary but advocates that the economic framework needs to be changed in order to reduce that dependency.

Bretschger then goes on to argue that growth has brought *500 million* people out of poverty in China and that developing countries want growth in order to reach our western standard of living. Seidl counters by bringing the example of India, where there has been economic growth but it has failed to bring people out of poverty. Schmelzer emphasizes the *global North's* responsibility in changing their lifestyle in order to enable the *global South's* development.

4.2.2 *Green Growth*

The next fundamental discussion point was the debate around green growth and a decoupling of economic growth from environmental impact.

Minsch states that CO2 emissions per capita in Switzerland are stagnating or even decreasing slightly and believes that this is sufficient. He states that there has been some decoupling in the past and emphasizes that Switzerland is in a good position in international comparison and is of the opinion that other countries first need to pick up to Switzerland in their efforts.

Bretschger also believes that a sufficient decoupling and therefore green growth is possible if we manage to grow non-material sectors, *yes, it can*. But the growth cannot be based on finite goods, it needs to be based on non-material goods: Knowledge, Human capital – these things can increase.

Schmelzer agrees that there has been some minimal decoupling in the past, but is sure that this is far from enough. He states that, *if we take climate science seriously we need to reduce our carbon emissions by 80% to 90% in the years to come*. It is just not enough if the emissions are stagnating. Such a minimal relative decoupling just means that the CO2 emissions stay the same from year to year even if the economy is growing by 0.4% or 0.5%. That is nowhere close to sufficient. We would need much more increase in efficiency – each year in the range from 6-10% was calculated if we are to reach ecological sustainability – There is simply no plausible scenario to reach that in a world of 9 Billion citizens. I think those are the questions we really need to deal with seriously. When the question is brought up again in a later part of the debate he goes on to

ask Bretschger, «I would be interested to know concretely how we should reach the climate goals within the next years, while simultaneously still having economic growth?»

Seidl does not directly answer the question but counters Minsch's proposition about decoupling and stagnating CO2 emissions in Switzerland, saying that there was only very minimal growth in Switzerland. «From 2009 to 2013 we only had 1.2% growth in general and 0.4% per capita. I am saying that this is minimal growth!» Indicating that there has been minimal to no decoupling at all in the past.

4.2.3 Willingness for Sufficiency?

Another question that is raised multiple times by the moderator is whether there could be a majority vote for more sufficiency in Switzerland. Or in his words, «Is there a willingness in our society to accept less affluent lifestyles?»

Minsch avoids answering the question directly but emphasizes the importance of growth to our current welfare system. He argues that the money for education, healthcare, pension schemes etc. does not fall from the sky – someone has to generate that money. «So if people would call for less growth they would have to be ready for a decreased quality of our welfare system and lower pension funds.» He goes on to highlight the difficulties for the Swiss national economy in a globalized market and calls it «a bit too easy» for us to just demand for them to grow a little less.

Seidl disagrees with Minsch, and points out that GDP and welfare are not necessarily corresponding, using the US as an example where 15% of their GDP is spent on welfare despite them having a much worse welfare compared to Switzerland.

To the general question by the moderator she responds by saying, «It depends on what we define as affluence.» She states that as long as people that have good healthcare, safe pension schemes, and good education for their kids, social justice and equality are more important to the public. «If we have an equal society where social differences are not too big and the basic needs of the population are met, then having less overall affluence it should be possible to sell to the people.» Then society is also willing to settle a bit less in certain aspects. «She also cites a number of 60% of the population that according to survey do not want to have growth necessarily, but they want jobs.» We have a new social movement where simpleness, sufficiency, humbleness and consciousness play a big role. «

Bretschger does not answer the question at all. Schmelzer points out a change, or even a «fundamental shift» in society caused by the growing inequality, and the people feeling that they were no longer personally profiting from the economic growth of the past years. «Their lives did not get any better because of economic growth.» The reason being, according to Schmelzer that

benefits from that growth are unevenly distributed. He cites Oxfam studies according to which 62 Individuals own as much as 50% of the world's population to highlight his point.

4.2.4 What needs to be done?

Although not asked directly, all the panel members offer an opinion and Ideas for the future.

Minsch:

Although Misch is overall pleased with the situation in Switzerland and emphasizes multiple times that Switzerland is doing well when it comes to resource consumption in global comparison, he acknowledges that, 'Yes, well ok, we still need to do much more' +

Generally he is of the opinion that Switzerland would contribute most by convincing other countries to engage in more environmentally friendly behavior and to save greenhouse gas emissions. He thinks that, if other countries are intensifying their efforts 'the Swiss economy doesn't have a problem to do more either. As soon as we have a level playing field where other countries are in a comparable situation as we [Switzerland] are, then we can discuss about more strict measures. +

Generally it could be concluded that he does not see the necessity to take strong action and opposes measures that aim at sufficiency or slowing consumption and growth. He therefore could be called a supporter of the status quo.

Schmelzer:

Schmelzer does not only see the necessity to take drastic measures, he thinks they are inevitable. As opposed to Minsch, he believes that the idea that we can just continue with 'business as usual' is one of the most dangerous contemporary Utopias. + He sees the necessity to think of new solutions, including possible solutions that have not been tried out yet.

In regard to income and wealth inequality, which he sees as a major problem, he believes that there is a need for a serious wealth redistribution program and names the example of wealth and property tax as a concrete measure which 'could very realistically be implemented in the coming years, if there is a will to do so. +

Generally he could be considered the panel member most in favor of drastic measures and a fundamental transformation of our current economic and political system.

Seidl:

Seidl clearly sees a need to internalize external costs into our economic system. She seemingly has the most detailed requests and ideas of what should be done and suggest e.g. raising the prices for electricity or implementing taxes.

She believes in the free market but demands that we ~~take~~ care of the distribution+and ~~set~~ a clear framework+within which the market can develop.

Bretschger:

Bretschger also believes that taxes can be a good solution and also suggests a range of rather broad and general actions, ~~we~~ we should support educational institutions, we should support a more social build up, and we need to promote more ecology. Then we would in theory have the chance to escape the development how we want it.+Further he states that, ~~we~~ we need to get out of fossil fuels+but suggests it would be better for the economy if we did so slowly so ~~to~~ (the economy) has time to react+. He also suggests that we need to push for reform of our economic system. He does however get slightly more concrete on that claim and suggests that ~~we~~ we need to agree on a environmentally sustainable economic system. And there, prices are an element, but there are also other elements, we can take products of the market or prescribe certain behaviors. So there are a range of opportunities to change the society that we can try.

4.2.5 Final Summary

Summarizing the above chapters, it could be said that there were three basic positions in the debate on growth:

- Seidl and Schmelzer advocate and emphasize the need for a transformation or at least reform of the current economic (and political) system to reach a state of degrowth, drastically reducing our greenhouse gas emissions. They are highly concerned about the future if truly drastic measure do not get implemented soon and are skeptical that ~~green~~ growth+is possible.
- Bretschger does not take a very clear side but tends towards promoting the idea of ~~qualitative~~+or ~~green~~ growth+and generally leaves it up to the people to decide, stating, ~~to~~ me it is essential what the people want and then we can model the markets and politics accordingly. The civil society is back! We can ask ourselves what we want and then set the framework how we want it.+He also quite strongly advocates the benefits of growth and could be seen as supporting the status quo with minor policy changes here and there.
- Minsch, well representing Economiesuisse, generally emphasizes the importance of growth to our economy. He believes that ~~green~~ growth+is already happening and rejects the idea

of Switzerland taking any isolated action or implementing any more drastic measures to mitigate climate change on its own.

4.3 Analysis of discussion

In this following chapter, the above summarized panel discussion is analyzed. It is aimed at highlighting challenges and obstacles to a fair, open pragmatic and constructive dialogue and at drawing possible connections to common dialogue difficulties highlighted under chapter 3. The analysis is based partly on subjective observations and personal interpretation and is therefore speculative at times, as the intrinsic motivations, preparations, plans, feelings and knowledge (backstage information) of the panel members are unavailable to be taken into account in this analysis (Martin, 2000).

The debate generally was held in a respectful and friendly tone. The moderator did a good job at critically questioning and reacting to the ongoing debate and offering equal speaking time to all the panel members.

As pointed out in the summary, no real consensus was reached and no real concessions were made. In part this might be related to the format of the debate, as it is set up as a short debate without a clear goal or necessity to reach a common agreement (other, possibly more constructive dialogue formats will be outlined under chapter 4.4) (Susskind, McKearnen, & Thomas-Lamar, 1999, p. x). As part of a scientific debate it is rather set up as a battle of arguments+where the point is to win+an argument rather than reaching consensus.

Scientific debates are an artificial process of acting rather than a spontaneous exchange of ideas. Protagonists carefully rehearse their arguments, often by trying them out on friends or advisers, exploring possible lines of argument and rejecting those that don't work well in public forums. The aim in a debate is to "win," namely to be recognized as having superior arguments, rather than to open a dialogue, explore commonalities or modify one's position. Weaknesses are hidden. Complexities are simplified to make supporting points or exaggerated to counter an opponent's point. Analogies are chosen to persuade, with illumination a desirable but optional extra. Assumptions are submerged, especially when they are not resonant with popular beliefs. In all of this, backstage discourse is hidden. (Martin, 2000)

But even if not considered a classical scientific debate, the fact that the debate is held in front of an audience generally does not favor the different panel members making big concessions to the debate partners as personal or professional identity is an important factor and as such is only rarely compromised in front of an audience (Martin, 2000; Naurin, 2007, p. 3). The short duration of

the debate also encourages non-commitment and increases the chance of use of rhetoric (Susskind, McKearnen, & Thomas-Lamar, 1999, p. x).

However, there are also various other obstacles or *dialogue difficulties* highlighted under chapter 3 to be observed. They will be presented in the following chapters.

4.3.1 Denial Strategies, Taboos and Hopelessness

Particularly Minsch and Bretschger seem to be engaging in some of the strategies explained under chapter 3.

Minsch takes part in the debate as a representative of Economiesuisse. It is therefore logical from his position, that he highlights the importance of growth to our economy and opposes strong government regulations. It is not possible to tell to what degree his statements represent his own personal opinions (see chapter 4.3.4). By generally taking the standpoint, that Switzerland has done much in the past to reduce carbon emissions and that there is no need for immediate further action that goes beyond what is already being done until ~~we~~ we reach a level playing field+he seems to be engaging in blame shifting strategies as described in chapter 3.1. This is reflected particularly in him taking an overall nationalistic approach and focusing on the accomplishments that Switzerland and the Swiss economy have made, generally putting blame on others: ~~and~~ until 2020 the Swiss economy will reach the Kyoto goals~~õ~~ as one of the very few countries worldwide. Therefore one can~~d~~ just say we~~ve~~ only done a little~~%~~. Or as quoted in the previous chapter: ~~%~~As soon as we have a level playing field where other countries are in a comparable situation as we (Switzerland) are, then we can discuss about more strict measures+.

Assuming that Minsch is well-informed about contemporary climate science, his apparent low level of concern might reflect a tendency towards complete or partial denial which, if taken seriously, would imply a very high level of reason for concern and an ever clearer call to action (see chapter 2.1.2 and 2.1.4). As mentioned it is unclear whether this reflects his own personal opinion or the ones of his employer, or both. However, as pointed out by Martin (2000), since such debates are often well rehearsed and argument planned out, it is highly likely that Minsch is arguing from a position as a representative of Economiesuisse. It therefore is also possible that his portrayed, low level of concern, stems from the constraint of a taboo. Even if it seems unlikely that Minsch would represent a growth defensive standpoint as strongly as he does without any personal conviction, the consequences of him suddenly changing his mind would most likely be far reaching, and would in the long run inevitably lead to him losing his position, status and professional reputation. It is therefore not unthinkable that he faces personal cognitive dissonance and difficult tradeoffs, but as

a professional representing his company, he is willing to stay in line with what is expected from him.

Bretschger shows a tendency towards hopelessness. He states: %a so these developments are very unusual, and sometime it is going to ~~umble~~in these coming years. And that will not go~~o~~ well as said previously, this will not pass us without our noticing. These political disavowals will come, simply because the systems are not right the way they are now+. As shown in chapter 3.3 this does not mean that he believes a total collapse or even apocalypse will happen but might be representative of the belief that the necessary adjustments are unlikely to be made under the current systems framework. Unlike the other panel members however, Bretschger's standpoint does not seem very coherent and the vagueness of his proposals in combination with his highlighting of difficulties to different strategies may be reflecting of a sense of helplessness. His believe in dematerialized growth does not seem to have a clearly defined basis and might be based more on unreasonable optimism than on grounded realism.

Further, similarly to Minsch, Bretschger might also be subject to certain taboos that arise from his professional position as an economist at the ETH. As professor of economy, taking an %anti-growth+stance might be a pretty radical position and could be considered breaking a taboo, along with all the possible difficulties transgressors might face in their personal and professional surroundings (see chapter 3.4.)

Further striking difficulties in this debate will be highlighted in the following two chapters.

4.3.2 Debate on different levels

Much as laid out in chapter 3.5, it is evident that the large difference in perception and understanding of urgency to take immediate actions creates a large gap between the panel members from the start. The debate therefore takes part on fundamentally different levels.

Particularly Seidl and Schmelzer who are convinced of the necessity for more and drastic measures, i.e. restricting growth and regulating the %free market+, to be implemented are arguing on a fundamentally different level than Minsch who basically sees no problem in the first place and is promoting preservation of the status quo of our economic system. Any sort of proposals from Seidl or Schmelzer are so far from his standpoint, that much as described in chapter 3.5 they seem to be engaging in entirely different debates on the same issue (Hoffman, 2011). The result of this is that arguments made by Seidl or Schmelzer for transformation and a new framework for economy are taken by Minsch and implemented into the status quo system to highlight difficulties when applied within the existing configuration. A good example of this might be the argument from Minsch when he is talking about the struggles of the different industry sectors when he suggests %they [the different sectors of industry] have large challenges to face, and for us to then just tell

them then: %well ok you can do [produce] a little less now if you want+, it just too simple of a solution+ - Minsch

4.3.3 Persuasive strategies

Besides giving a good example of a debate on fundamentally different levels as shown above, this debate also offers a good example of the use of persuasive strategies as highlighted in chapter 3.5, %trying to convince the audience that one's arguments are %legitimate and plausible in a common sense (Bizzozero, 2014)+. This strategy (consciously or unconsciously) seems evident with Minsch who often chooses to interact directly with the audience instead of the other panel members. E.g. sGrowth is a good thing! Just look at this beautiful auditorium that we are sitting in. In the mid-ages after centuries of zero-growth there would have maybe been ten student in this room. Where the aristocratic parents of the sons and daughters, or only sons at that time, would have sent them. We have incredible wealth throughout our society today. That was only possible because of growth. You can only study here because there was a wonderful period of growth in the past!+

That this argument (%growth was good in the past therefore must be good in the future+) also is beside the point and is based on wrong assumptions is already shown in the list of arguments under chapter 3.6.

4.4 Alternative Discussion Formats and Conclusions

It may be concluded from the above analyzed debate, that whilst such public debates might be useful in raising general awareness for a problem and promoting the mainstreaming of a topic by reaching a bigger audience, they generally are unsuitable for nurturing consensus or reaching concessions on either side of the debate.

The short duration of one hour to deal with such fundamental issues and the vastly different starting points of the different panel members make a meaningful and constructive dialogue, where possibly even concessions are made and consensus is reached, unlikely if not impossible (Schein, 1993).

Additionally the danger of losing %face+and the difficulty with panel members representing their professional position and therefore being restricted in allowing consensus or generally moving away from their appointed ideas in such public debate is clear (Flecha, 2000, p. 2).

Alternative discussion formats better suited for promoting consensus and an open, fair, and constructive dialogue, should aim at overcoming the inherent difficulties that lie in the nature of public debates with no incentive for concessions and no clear goal for consensus. Promoting inclusive dialogue instead of confrontational debates is advisable.

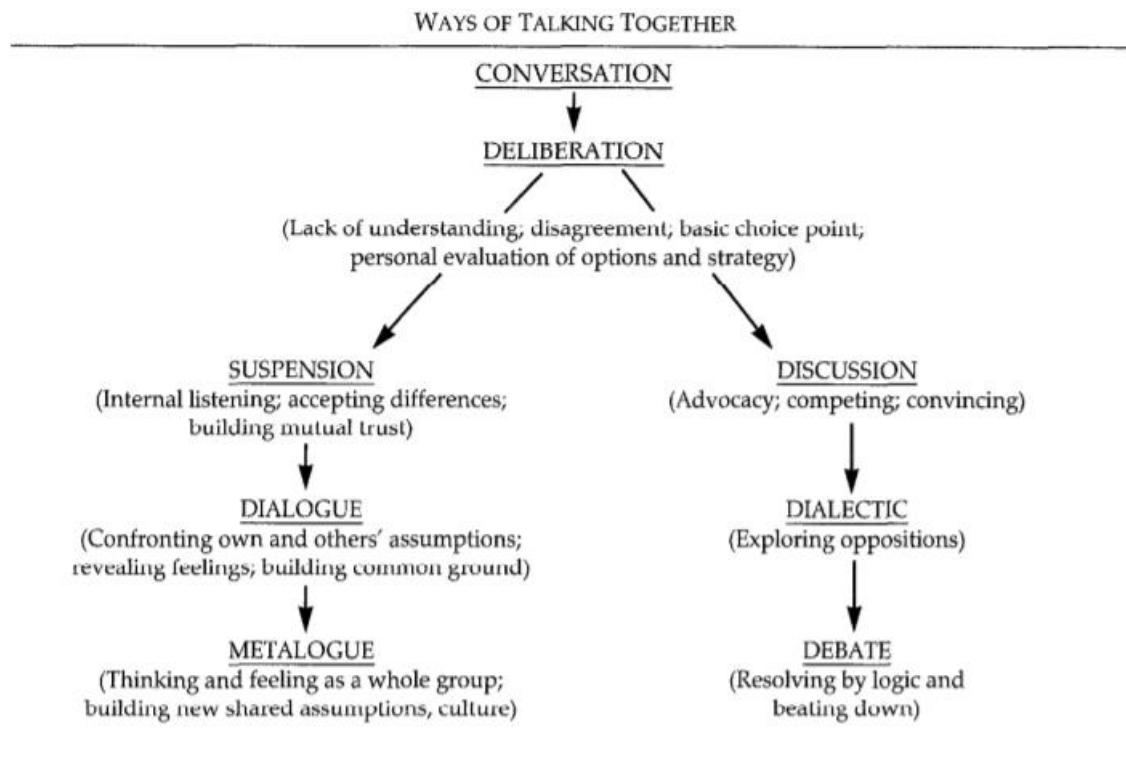


Figure 14: The ways to Dialogue or Debate in a conversation (Schein, 1993).

Dialogue formats that stretch over multiple sessions and have the clear goal of reaching consensus might be a promising alternative to such one-time win-format+debates where each side is more prone to win+the argument or persuade the audience instead of listening and gaining from the conversation partners.

In the consensus building handbook+Susskind, McKearnen, & Thomas-Lamar (1999) lay out different strategies of consensus-based approaches to problem solving. They make out a strong distinction between temporary groups and permanent organizations. Temporary groups, they suggest face additional obstacles based on the lack of commitment and particularly in the public arena+face the obstacle of split loyalties as they are not only committed to the group or process they are joining, but also the organization or group that they are representing (Susskind, McKearnen, & Thomas-Lamar, 1999, p. x). Rudolf Minsch might offer a good example of this theory in the examined debate (see chapter 4.3).

There are various proposals, ideas and examples for more constructive forms of dialogue which overcome these difficulties of split loyalties and lacking commitment. The theory of egalitarian dialogue as presented by Flecha, (2000) is only one proposal.

Dialogue is egalitarian when it takes different contributions into consideration according to the validity of their reasoning, instead of according to the positions of power held by those who make the contributions+ (Flecha, 2000, p.2).

Egalitarian dialogue might thus be a good way of overcoming the obstacle of split loyalties. In practice however, this might prove difficult to realize, as stakeholders might be opposed (consciously or unconsciously) to committing to such a form of dialogue or sticking to the rules of it. This might be true for all attempts of proposing a fair, egalitarian, pragmatic and constructive dialogue with stakeholders that are not internally committed to such formats or that are lacking incentives to reach a consensus.

In a practical setting, these inevitable obstacles might only be overcome through non-public, off-record discussions in which inherently there is no political accountability. Unfortunately commitments that lead to actions are unlikely to emerge from such a framework, especially in stakeholders generally objected to sufficiency strategies in the first place, or restricted by their position outside of the debate environment. This might still be true even if group participants gain a mutual respect for and understanding of each other's viewpoints.+in the process such dialogue as suggested by Susskind, McKearnen, & Thomas-Lamar (1999, p. x).

Hoffman suggests the re-activation of broker categories+and climate brokers+in the face of these difficulties.

As the debate appears to be reaching a level of polarization where one might begin to question whether meaningful dialogue and problem solving has become unavailable to participants. The implications of such a logic schism is a shift from an integrative debate focused on addressing interests, to a distributive battle over concessionary agreements with each side pursuing its goals by demonizing the other. Hoffman suggest an activation of mediator or broker+categories such as technology, religion, and national security+or an effective engagement of climate brokers+ (Hoffman, 2011).

The same is suggested by (Susskind, McKearnen, & Thomas-Lamar, 1999) in the face of strong disagreements between dialogue parties. In fact such mediation models+do have potential to bring together different interest groups and possibly loosen apparent political deadlocks in some cases (Minsch, 2004). Regardless of the potential for alternative dialogue formats on strategies on an institutional or political level, the political class's past inability to reach even the most basic consensus on climate change or effective mitigation strategies beyond political green washing+is not a reason for great hope along that line in the future.

One has to conclude, although there is potential for such long term, consensus based debate or dialogue formats, they might be restricted to a niche group of scientists, public figures or politicians. Mainstream public figures or politicians are unlikely to partake in such a debate, based on the taboo nature of the topic and other described obstacles and difficulties to an open and pragmatic dialogue on sufficiency and growth (see chapter 3). Even if committed, reasonable consensus among policy makers is unlikely to emerge due to the conflict of interest with underlying power-structures. Thus, constructive agreement might only be possible outside of mainstream politics or by great pressure from the general public and grass-roots movements on decision makers.

Notwithstanding, potential for such public debates in the above presented formats might be significant in raising awareness to a broader public, having educational effects and encouraging broader public dialogue and potentially small-scale adaption to the threats of climate change. Motivation might arise from the presentation of compelling facts or the questioning of public leaders in such debate, which encourages taking part in a public dialogue or small scale actions. Those in turn might be the best chance of implementing political adjustments on institutional levels which in turn might enable or encourage more public dialogue and additional small-scale actions (see chapter 5.6). As public dialogue and small-scale actions are also mutually reinforcing, this might even lead to positive feedback loops and eventually flip the switch as suggested in Dan and Chip Heath's book (Heath, 2010). These connections are represented in figure 9.

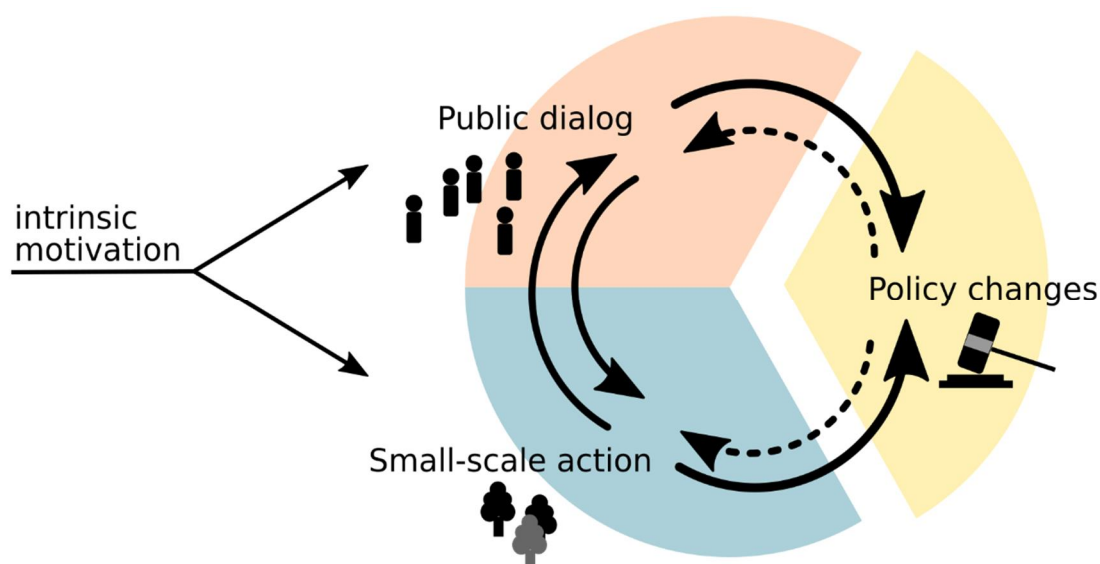


Figure 15: Representation of the influence of Small-scale action and public debate on each other and on possible policy changes. Initially stands intrinsic motivation for active mitigation strategies. Each arrow represents influence on other factors. (If all factors are activated, positive feedback loops might arise).

5 Overcoming Dialogue Difficulties

In the previous parts to this thesis various obstacles and difficulties for an open and constructive debate on sufficiency and growth were outlined. In this following chapter, strategies and ways to possibly overcome some of the named difficulties will be presented.

5.1 Dealing with Denial and promoting adaptive coping strategies

Overcoming or at least actively dealing with denial in all its forms is not only an important way to an improved dialogue culture, it is also essential for the promotion and implementation of climate mitigation strategies and pro-environmental behavior in general (Weber & Stern, 2011; Bain et al. 2012).

There are many possible ways to reduce denialism. For one, simply raising awareness for the facts and informing the public better about the state of science and therefore convincing them of the necessity to take action is important (Weber & Stern, 2011). This could be done in various ways, from activism, to lobbying, to encouraging well informed public debates, etc. Since the severity of projected climate change still seems unclear to many, this could be seen as one primary objective. Stoll Kleeman et. Al. as an example suggest in that regard,

There is no reason why the petrol station should not become a location for awareness raising over climate change mitigation behavior, a learning space where car drivers can play on interactive models of transport-related climate matters before filling up. In this sense the petrol station could become a joint venture between socially responsible oil and vehicle businesses, local education authorities, and local governments with local pools of revenue to spend on various transport options (Stoll-Kleemann, O'Riordan, & Jaeger, 2001).+

However there are also studies showing that likelihood of conversion using scientific evidence is limited+or can even make certain types of deniers more resolute in their opinion since denialism often and increasingly is based on ideological positions or is the result of maladaptive coping strategies (Bain et al., 2012; Hamilton, 2010).

Most adaptation literature assumes that accepting the need to act follows from demonstrating the damage that will follow from failing to act. This makes the unwarranted assumption that humans respond to threats with adaptive coping strategies rather than with psychologically maladaptive ones or forms of denial.+
- (Smith, Horrocks, Harvey, & Hamilton, 2011).

But there are also many other ways of promoting pro environmental action in climate change deniers and encouraging adaptive coping strategies rather than maladaptive ones. Generally, successful strategies should be aimed more at communicating how mitigating efforts can promote better societies with a better communal life and create a more considerate and caring environment rather than highlighting the reality and risks of climate change (Bain, Homsey, Bongiorno, & Jeffries, 2012). Particularly a sense of shared community becomes important for those possibly feeling hopeless, helpless and isolated in their worries for the future.

While only a minority are pursuing adaptive coping strategies while others are engaged in denial or maladaptive strategies, the former may feel isolated and disempowered, and governments and other institutions will be under less pressure to undertake adaptation measures (Smith, Horrocks, Harvey, & Hamilton, 2011)

Therefore leading by good example and creating positive communities and cooperatives promoting intrinsic, rather than materialistic values can be meaningful in encouraging pro-environmental behavior as shown in the following chapter.

Furthermore a mindful way of accepting and dealing with emotions such as fear, anxiety, depression or helplessness emerging from the acceptance of the threats of climate change can also offer relief and promote adaptive coping strategies. As shown in chapter 2.3, meditation practices might promote mindful processing of these unpleasant emotions (Delmonte, 1985; Lutz, Johnstone, & Davidson, 2008; Sears & Kraus, 2009). Further, it seems, that actively regulating times of engagement and exposure, with times of rejoicing (by engaging in balancing activities) might also be a valid strategy that offers relief from feelings of being overwhelmed or depressed

The choice is between different mental models, which lead logically to different scenarios.

One mental model says that this world for all practical purposes has no limits. Choosing that mental model will encourage extractive business as usual and take the human economy even farther beyond the limits. The result will be collapse.

Another mental model says that the limits are real and close, and that there is not enough time, and that people cannot be moderate or responsible or compassionate. At least not in time. That model is self-fulfilling. If the world's people choose to believe it, they will be proven right. The result will be collapse.

A third mental model says that the limits are real and close and in some cases below our current levels of throughput. But there is just enough time, with no time to waste. There is just enough energy, enough material, enough money, enough environmental resilience, and enough human virtue to bring about a planned reduction in the ecological footprint of humankind: a sustainability revolution to a much better world for the vast majority+- (Meadows, Randers, & Meadows, 2004, p. 283)

5.2 Narrowing the Gap

As described in chapter 3.5 the large and growing gap in perceptions and opinions on climate change is a main difficulty to having a fair and open public dialogue (McCright & Dunlap, 2011; Hoffman, 2011). As there is no use in discussing possible climate mitigation strategies with someone who is in denial about climate change altogether, different strategies are needed for meaningful debates on different levels.

Timm et al. (2015) from the University of Alaska Fairbanks made out different climate change communication strategies for different levels of certainty and risk perceptions in people. They describe four different levels of certainty and risk perception, from complete denial to optimists and planners as shown in see Figure 9. They outline different communication strategies for each type. E.g. focusing on peripheral information processing and cues like visuals, humor etc. with denialist; or explaining local impacts from climate change concretely and highlighting positive outcomes from mitigation strategies like risk management or community with optimists (Timm, Pettit, Sparrow, & Taylor, 2015). This analysis is just one example but seems a good starting point and should similarly be considered for promoting an open and constructive dialogue.

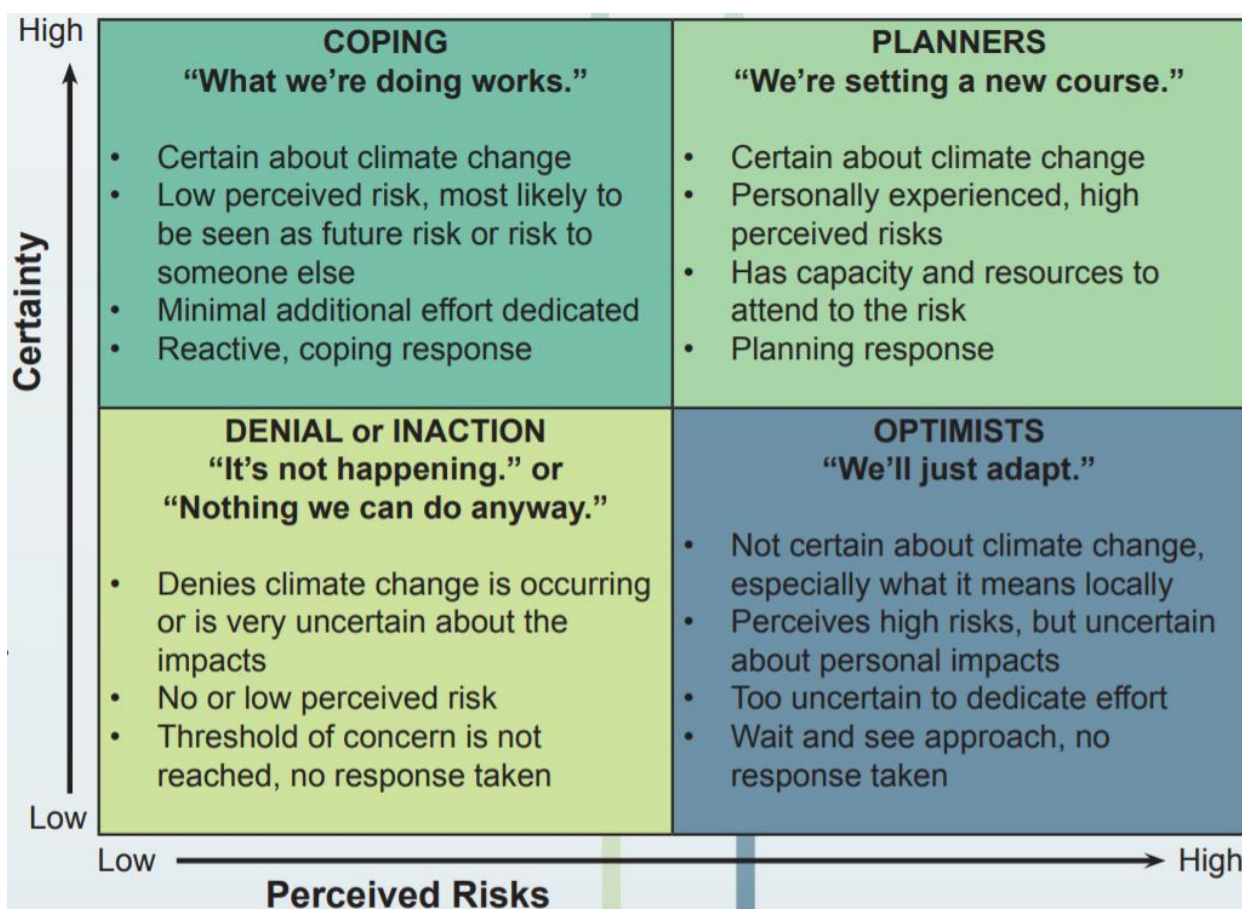


Figure 16: Shows four categories of certainty and risk perception from denialist to planners and corresponding criteria to each category (Timm et al., 2015).

Therefore the very different starting points to a debate need to be considered and communication strategies or even talking points need to be adapted accordingly. In a debate as the one analyzed in chapter 4, it might be advisable to start with a basic agreement; e.g. on the need to take action in the first place. If such agreement cannot be reached from the outset, a debate might first need to focus on leveling the playing field. Such short, one-time debates as the one presented in chapter 4 make such procedure difficult and one might end up using all of the discussion time debating whether action needs to be taken at all. This time might need to be taken however, and patience

afforded in order to allow a fair dialogue at all, since a dialogue in which half the participants are proposing ever more detailed and drastic solutions while the other side is questioning the existence of any problem at all is not constructive. Different dialogue formats as presented under chapter 4.3.4 therefore might be useful or necessary to promote a more meaningful and constructive public dialogue. Further, as Hoffman (2011) argues, effective ~~climate brokers~~+or dormant ~~broker~~ categories+such as religion, national security etc. might be useful in arbitrating the debate and therefore help to narrow the gap.

5.3 Breaking Taboos

There are many ways to challenge and overcome societal taboos, however there is very little research or scientific material available (Eisenack et al., 2014). For the most part, the research available is descriptive, and important scientific publication on how to overcome Taboos is scarce.

~~as~~ people or a nation can be no more advanced than its taboos.~~q~~. (Browne 1984b, p. 4 as cited in Kallio, 2007)

In the following section, some possible approaches and examples of ways to effectively overcome the taboo of economic growth in public debate will be described. The list is non exhaustive and is mainly based on reflection by the author of this thesis and conversations with engaged actors:

-Popular public figures

Public figures can have great influence in either perpetrating or resisting change. The same might be true for breaking taboos. Eisenack et al., (2014) notice, that:

~~For~~ example, first steps are frequently driven and led by a few committed individuals (for example, a staff member or elected official) who create the necessary action space for other actors~~õ~~ + ~~the~~ Leadership (regardless of position or authority) can be crucial in the early stages of adaptation. Inspired leadership can establish novel governance mechanisms and create a significantly changed context for decision-making.~~+~~ (Eisenack et al., 2014)

This is not to say we should rely on new leaders to emerge and solve our problems as we have done in the past with sometimes fatal outcome (just think of Nazi Germany). It should also not be an incentive to become passive, believe in faith and wait for a messiahs to solve our problems as many religions do. In that regard Eisenack et al. (2014) write, ~~On~~ the other hand, reliance on individual leaders can also make jurisdictions susceptible to abuse of power, stalled social learning and dominance by single influential actors+. However individual leaders do have the power to question taboos, make new standards acceptable and encourage a broader public to engage in

political discourse. Take the US. Civil rights movement with Martin Luther King and Rosa Parks as an example, or the overthrow of the apartheid regime in South Africa and Nelson Mandela who personified that change (Parks & Haskins, 1992; Glad, 1997).

-NGOs, Labor Unions and others

In the same way as single public figures can break the ice on taboos and create the necessary action and space for other actors, NGOs, Labor Unions, Student Unions etc. might have the same leading influence. If unified behind a cause or idea the potential to encourage public figures to step forward and use the group dynamics to draw others in or push political agendas. Particularly in a direct democracy, leading political campaigns (even if not successful politically) bear great potential to raise awareness for certain topics (see also chapter 5.5 and 5.6).

-Activism

The way to break the taboo is to do the taboo thing is the title of an article from Kate Boyer where she writes about breastfeeding in public and citizen activism in the UK (Boyer, 2011). Similarly, activism and public transgression of social boundaries by each and every individual familiar with the problems we are facing will be of great importance in overcoming taboos and mainstreaming a discourse on our current economy's dependence on growth (Eisenack et al., 2014). They will have to be willing to face and accept the adverse effects associated with breaking taboos, described under the previous chapter and not be discouraged by setbacks. This takes courage and not seldom a strong community backing the initial transgressor and might be considered a form of activism.

Activism can take many forms: from calling out a superior at work; to bringing up the uncomfortable topic to professors at schools, or to family and peers at the dinner table; to actively taking part in protest movements, rallies; or writing letters, emails or comments on social media to government or media officials etcetera. As mentioned this often takes courage and is not always received positively at dinner table discussions as the topic at hand is not a light one. However, it seems we would have a moral duty and obligation to act, (beyond buying organic produce and deciding to only fly to Bali once this year) not only towards the people currently suffering from climate change and pollution in developing countries around the globe, but also to our children and future generations.

From the perspective of societal development, taboos can be seen as cultural anchors that decelerate change. Conversely, as taboos break, social reality changes. Open discussion about taboos could thus challenge the status quo,

and once a taboo has been broken, it might be extremely difficult to reinstate it+
- (Kallio, 2007; citing Michelson, 2002)

5.4 Persistent Power Structures

Current money and power structures are shown in chapter 3.1.2 to be a vital driver of denialism and a great obstacle to successfully implementing meaningful climate mitigation policies. Although plenty of suggestions for potentially meaningful policy measures such as impact caps, rationing pigouvian taxation, or other taxes which aim at internalizing external costs exist, they stand little chances in international policy, and are rarely even brought up in political debates on possible mitigation strategies (Alcott, 2010; Gössling & Cohen, 2014). Politically more successful ideas of green economy or *Energiewende* which often constitute no more than green-washing have shown to be ineffective and have failed to meaningfully reduce our impact in the past decades (Schanes, Jäger, & Drummond, 2018).

The complete failure of the UN climate summit 2015 in Paris therefore is representative for the incapability of our political class to agree on substantial and meaningful mitigation policies (Schanes, Jäger, & Drummond, 2018).

As also shown under chapter 3.1.2 government policy for the most part has been *high jacked*+by corporate interests and particularly in the US do not represent the common people (Gilens & Page, 2014). On top of that, there are countless other difficulties for collective government actions to come about with meaningful mitigation policies (Schanes, Jäger, & Drummond, 2018). Under these circumstances it would not be wrong nor cynical to speak of complete state failure.

State failure can also occur, when decision making processes hinder or prevent the emergence of political will, or are distorted by powerful interest.+ (Minsch et al., 1998, p. 32; my translation)

So to direct hopes for future changes to be implemented at that level; or to project disappointment or anger about past failures at government officials would be misguided, as it is not the representatives of governments but the system of profit oriented economics that inherently promotes such unsustainable behavior (Næss, 2006).

Trying to overcome these power structures directly might prove difficult if not impossible as long as there are no clear alternatives and a strong and substantial part of society backing them. Efforts might be guided better at engaging in small-scale action and building of more independent communities as laid out in chapter 5.6 than in directly trying to challenge these international power structures.

However, engaging in small-scale action and the improbability of directly overcoming these power structures does not lessen the need to for political engagement or the need for dialogue on sufficiency and growth to be conducted and promoted to a wider audience (Schneidewind & Zahrnt, 2014).

% sufficiency must not consist only of small-scale projects but needs to be taken seriously as a matter of wide political significance, so that supporting framework conditions can be put in place to enable it to spread even within existing structures. That is why it is so important for debates over growth, sustainability and the Good Life to be conducted in the political arena and in wider society in order to promote a reorientation.+ (Schneidewind & Zahrnt, 2014, p. 139)

Such political engagement could be in the form of activism as mentioned in the above chapter on overcoming taboos, or partaking in the political process. Particularly in Switzerland with a %direct democracy+and relatively good representation of the peoples will in parliaments, this process can be effective (Stadelmann, Portmann, & Eichenberger, 2013). Signing petitions, launching initiatives or engaging with local politicians can be therefore an effective means of institutionalizing a more sustainable society even on a wider scale. It can therefore be crucial in enabling small-scale solutions and setting adequate frameworks for independent solutions to emerge (See figure 9; chapter 4.3.4). Forming alliances as suggested in the next chapter will be important to taking such political debate further into mainstream.

%A feature shared by certain major revolutions is that they were not anticipated. Here is an explanation, which hinges on the observation that people who come to dislike their government are apt to hide their desire for change as long as the opposition seems weak. Because of this preference falsification, a government that appears unshakeable might see its support crumble following a slight surge in the opposition's apparent size, caused by events insignificant in and of themselves.+ (Kuran, 1989)

5.5 Forming Alliances

There are many reasons to oppose the current system of unsustainable growth and the underlying system of unchecked neoliberal-capitalism. Environmental concerns are only one facet. Concerns about social justice and the growing wealth gap, the seeming increase in danger of wars for oil and resources, density stress or the many adverse health effects of an accelerating world, all could

give reason to question the legitimacy of mandatory economic growth (Kasser et al., 2007; Piketty, 2014; Chomsky, Achcar, & Shalom, 2015, p. 53; Le Billon, 2001; Harrison, 2011).

The multitude of underlying reasons to object to the current forms of contemporary neo-liberal capitalism are mirrored in the multitude of movements, ideas and ideologies opposing them (Rucht, 2016). From degrowth and décroissance to ATTAC or transition town movements, to social ecology or ecofeminists to the indigenous/south movements; or from Marxism to Leninism, to Trozkyism to the various forms of anarchism, all question the current imperative of growth (Hopwood, Mellor, & O'Brien, 2005; Rucht, 2016). But although all of these movements and ideologies seemingly oppose and criticize the current economic situation, there is little cooperation between these movements and they all seem to be fighting separate battles (Rucht, 2016; Sklair, 1995; Minsch, 2004).

Thus, whilst it is probably unreasonable to suggest they all find a common political agenda to push, due to the various highly different backgrounds and disciplines that these movements and groups come from, a pragmatic dialogue between them holds great potential for building alliances, if only on the most basic communalities. These broader alliances would in turn have great potential for moving a public debate further into the mainstream and raising awareness for difficulties and solutions at hand (Hopwood, Mellor, & O'Brien, 2005).

Transformationists view of the connection between environmental degradation and human exploitation encourages the building of alliances between environmental and social justice movements. The challenge they face is how to mobilize a coalition that is powerful and cohesive enough to realize the needed changes. The core values of sustainable development as outlined by Haughton are environmental protection and justice+- (Hopwood, Mellor, & O'Brien, 2005).

It could be suggested, that exclusive commitment to one solution, movement, ideology or idea might not be sensible at this time, and compromising for the sake of a possible greater alliance with the chance of raising the issues at hand into mainstream public and political debate might be advisable.

However, we do not see it as necessary or sensible to make an exclusive commitment to transformation. Reform now is better than nothing and transformation may not be immediately feasible. However, whilst engaging with government and business for reforms, the main focus should be to raise the issues, successful mobilization of the media and to build coalitions linking researchers, popular protest and direct action. (Hopwood, Mellor, & O'Brien, 2005)

5.6 Small-Scale Communities and Hope

Although not directly a part of a public dialogue on sufficiency and growth, forming and promoting small-scale sustainable communities has great potential in encouraging a better dialogue.

Engaging in small-scale community-based actions that promote a sustainable lifestyle is helpful to overcome many of the dialogue difficulties mentioned (see chapter 3). It is suggested in this chapter, that it not only assists with overcoming denial, helplessness, hopelessness and overall promote adaptive coping strategies, it might be the best way to challenge existing power structures and promote sustainable lifestyles in the mainstream.

What it takes is a scale at which one can feel a degree of control over the processes of life, at which individuals become neighbors and lovers instead of just acquaintances and ciphers, makers and creators instead of just users and consumers, participants and protagonists instead of just voters and taxpayers. That scale is the human scale+ (Sale, 1980, p.39; emphasis in the original, as cited in Jucker, 2014, p. 29)

The potential of small scale community based actions include:

- Re-instilling hope by offering a vision and sense of true community and therefore promoting intrinsic, non-material values (Hamilton & Kasser, 2009; Kallis, 2011; Curtis, 2003).
- Overcoming the common feeling of helplessness by; offering direct ways to engage and make a difference that is visible; realizing ones impact on one's immediate surroundings and therefore also empowering small-scale political action and promoting true democracy (Hamilton & Kasser, 2009; Christens & Speer, 2015)
- Encouraging adaptive coping strategies by promoting concrete examples to engage in and showing that sufficiency can also mean better living i.e. living better with less (Schneidewind & Zahrt, 2014; Alexander, 2012).
- Helping to overcome societal taboos around sufficiency and growth by increasing courage to act and empowerment through community based self-esteem, thus encouraging potential transgressors (Christens & Speer, 2015).
- Deflating+current power structures by revoking the power they hold over many parts of our lives by disengaging from the lifestyle they promote, thus removing our dependency on the

current system and power structures; offer an alternative to the current system
(Schneidewind & Zahrnt, 2014, p. 138)

Engaging in small-scale community based actions and networks and promoting a sustainable lifestyle that is fun and meaningful therefore is crucial to overcome many of the difficulties outlined in this thesis (Curtis, 2003). Initiatives like %Neustart Schweiz+with projects like NeNA1 in Zürich or the promising %transition town movement+therefor offer great potential in leading a new sustainable way for our society (Smith, 2011).

%Nur noch Utopien sind realistisch%(Negt & Burow, 2012)

6 Conclusions

As many conclusions already have been drawn in the previous chapter, this is a brief summary of the most important points that emerged from the writing of this thesis.

The first conclusion might be that the obstacles to an open, pragmatic and constructive dialogue on sufficiency and growth are seemingly endless. From the outlined, still wide spread, denialism, to influential money and power structures or the many obstacles people face when questioning economic growth in general. Whilst some of them appear manageable and can possibly be overcome, others seem almost unresolvable in the short term and might lead to a feeling of hopelessness in people trying to deal with them.

However, despite the limitations from the range of obstacles and difficulties not only to such meaningful dialogue itself, but also to the impact it can have in changing society towards true sustainability in the near future, there is an important role to play for an open, pragmatic and constructive, public dialogue on sufficiency and growth. Not only can it bring broader public exposure to the topic, it has the potential to outline possible alternatives, offer a platform to engage in and therefore re-instill hope in those currently feeling isolated and helpless in their efforts. Further it has the ability to bring currently isolated movements to engage with each other on a constructive and community building basis and help with the mainstreaming of the concept and implementation of a truly sustainable lifestyle based on sufficiency and well-being.

Small-scale community based action was shown to be a useful and necessary element of a transition towards a more sustainable society. It may offer hope, encourage adaptive emotional coping strategies, offer courage for the transgression of taboos and most importantly might provide positive examples and show that sufficiency is not just an abstract idea which implies having less, but also and above all implies better living.

The humanism consonant with our epoch must replace and reverse principles and norms that we have heretofore regarded as untouchable, but that have become inapplicable, or discordant with our purpose; it must encourage the rise of new value systems to redress our inner balance, and of new spiritual, ethical, philosophical, social, political, aesthetic, and artistic motivations to fill the emptiness of our life; it must be capable of restoring within us love, friendship, understanding, solidarity, a spirit of sacrifice, conviviality; and it must make us understand that the more closely these qualities link us to other forms of life and to our brothers and sisters everywhere in the world, the more we shall gain.+.

Aurelio Peccei cited in (Meadows, Randers, & Meadows, 2004, p. 282)

7 Personal Conclusions

This following and last chapter includes some personal conclusions and thoughts on this topic which have emerged during the writing of this thesis:

Over the long and intensive course of writing this thesis, the possibility for bias or ~~filter bubbles~~ Has often been considered. I would lie if I said that I did not also hope to find contradicting evidence and science that contrast the extremely grim outlook presented e.g. by Hamilton and others. Unfortunately no such evidence could be found even when actively looking outside of possible ~~filter bubbles~~. The science behind climate change seems to be painting an ever clearer and unfortunately also darker picture of the future on this planet. After researching difficulties and obstacles to a mere debate on growth and climate change that might have a chance of mitigating some of the predicted effects, it soon became clear that the situation we are facing will not easily be changed. The topic is of such complexity and there are so many obstacles that any optimism for us to turn things around in time, starts to seem unreasonable. I am not a pessimistic person. In fact I am considered a hopeless optimist by most who know me. Fortunately this did not change fundamentally over the course of the writing of this thesis. But let's face it: the situation we are currently looking at as a human race is frightening. Not only the threats of climate change, the many other social and environmental aspects such as biodiversity loss and all the other planetary boundaries we are currently exceeding but, as of recently the revived threats of political conflict and war on many parts of the planet are reasons for great worry.

And yet hope is so important in many different ways. But where do we take it from?

I would argue that the source of our hope might need to be readjusted. Although the hurdles to change our global behavior sufficiently and in time to avoid adverse effects seem insurmountable (Hamilton (2010) argues that this time has already passed), we must not take this and anticipate the end of the world. Sometimes old systems need a shock or even complete failure before new and possibly better systems can emerge. Nevertheless this is not an excuse to sit back and engage in destructive lifestyles ~~because it doesn't matter anyways~~. New systems do not emerge out of nowhere, and its preceding framework will largely determine the new premises. If we feed new system with ignorance and do not learn from mistakes of the past, the outcome is unlikely to be a good one. So what can we to do?

In my opinion and as indicated in this thesis, creating positive and sustainable environments on a small scale might be the best option to start reshaping the system. Concretely, this might mean engaging in, or supporting local sharing communities, agricultural- and housing cooperative societies, community gardens or food sharing communities, repair shops etc. The options are really endless. Fortunately, this is already happening in many places around the globe, and is reason for great hope. There are hints of a paradigm change that lead many to question much of

what went unquestioned for decades or even centuries. We are breaking with our unsustainable behavior out of a deeply rooted conviction and are figuring out ways to apply all of the knowledge and technology of our age in positive and sustainable ways. New communities and neighborhoods are forming that support each other and are as independent as possible from global destructive systems under the current settings. They are leading a way for systems to come and re-instill hope in those currently suffering the numbing feeling of helplessness.

These first attempts must motivate us and call us to action, however we cannot rely on them to bring about system change. There is no substitute for personal engagement. We cannot depend on politicians, NGOs, scientists our peers nor anyone else to bring about these new ways. Every single one of us is crucial to the shaping of these new communities, both politically and also as facilitators, allowing them to emerge and unfold on a small scale. Leading by example and engaging in the political process has the power to draw attention to the active movements and has the ability to show a broader general public that there are solutions and ideas to engage in. This in turn might unleash even more energy, currently numbed by a feeling of hope- and helplessness in many.

In sum, open and constructive dialog on sufficiency and growth play pivotal roles in the process of reshaping our society. With patience and understanding for those with different opinions and persistent, ever-increasing activism, we generate momentum to change the world for the better.

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Abbildungsverzeichnis

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Appendix A:**Transcript Podium discussion sUnendliches Wirtschaftswachstum auf einem endlichen Planeten%**

Geführt im Rahmen der Nachhaltigkeitswoche an der UZH 2016

Teilnehmer:

- Dr. Mathias Schmelzer (UZH)
- Prof. Dr. Irmie Seidl (WSL)
- Prof. Dr. Lucas Bretschger (ETH)
- Prof. Dr. Rudolf Minsch (Economiesuisse)

Moderation:

- Sandro Brotz (SRF)

Link zur Aufzeichnung:

<https://www.nachhaltigkeitswoche.ch/2016/aktuell/videoaufnahme-podiumsdiskussion-unendliches-wirtschaftswachstum-auf-einem-endlichen-planet/index.html>

0.00 Moderator:

Guten Abend meine Damen und Herren, ich möchte sie sehr herzlich zur heutigen Podiumsdiskussion begrüßen, ich muss zugeben, ich in etwas überwältigt wie viele Leute heute Abend gekommen sind. Es ist ja der erste Tag der Nachhaltigkeitswoche und dass der Saal schon so voll ist das freut uns wirklich ausserordentlich. In der nächsten Tagen wird es weitergehen mit spannenden Veranstaltungen, wir müssen leider auch sagen dass wir fast keinen Programmheften

mehr haben, deshalb müsst ihr das Programm noch auf den Internet nachschauen wenn ihr keines ergattert habt bisher.

Neben den Programm stellen wir diese Nachhaltigkeitswoche jeden Tag eine Forderung an den Hochschulen, wir wollen die Hochschulen damit auf Nachhaltigkeits-defizite unsererseits aufmerksam machen. Uns ist ganz wichtig dass unsere Forderungen eine konstruktive Kritik an den Hochschulen sein sollen, wir wollen zusammen mit den Hochschulen die Nachhaltigkeit verbessern. Heute stellen wir die erste Forderung, und diese Forderung hängt sehr stark mit unserem Podium heute Abend. Wir fordern nämlich die Hochschulen auf, dass diese Diskussion, die wir heute Abend hier führen, dass diese Diskussion viel stärker auch an den Hochschulen geführt wird. Insbesondere finden wir das nicht **nur** neoklassische Modelle dabei berücksichtigt werden sollen, sondern auch alternative wachstumskritische Ansätze in die Forschung und Lehre miteinbezogen werden sollen.

Nur so kann eine wirklich kontroverse Diskussion zu diesem Thema stattfinden.

Bevor wir beginnen, noch eine letzte Information: Die Podiumsdiskussion wird gefilmt, ich bitte alle Leute die nicht auf irgendeine Bild erschienen wollen oben links zu sitzen. So kann dieser Wunsch miteinbezogen werden. Jetzt will ich das Wort Sandro Bortz übergeben, er wird die Podiumsdiskussion moderieren. Ich glaube ich muss ihm nicht gross vorstellen, er ist Moderator bei der SRF Rundschau und es freut uns sehr, dass er nach letztes Jahr wieder hier an die Nachhaltigkeitswoche kommt um eine Podiumsdiskussion zu moderieren.

2:50 Sandro Brotz (Moderator SRF Rundschau): Guten Abend auch von meine Seite her, ja ich bin einverstanden dass man mich filmt. Mein Namen ist Sandro Brotz, und wir machen heute eine Rundschau rund um eine der wichtigsten Fragen, und schwierigsten Fragen überhaupt, es geht um Wachstum und runtergebrochen um die Frage ~~Was~~ **Müssen wir aufs Gas oder auf die Bremsen treten?**+und vor allem was bedeutet es für unsere Umwelt. Ich stelle ihnen meine Gäste vor, mit ihnen werde ich rund eine Stunde diskutieren. Ich möchte dann aber schnell ins Publikum gehen und die Möglichkeit für Fragen offen lassen. Rudolf Minsch ist Chefökonom von EconomieSuisse, dem Dachverband der Schweizer Wirtschaft. Lucas Bretschger ist Professor für Volkswirtschaftslehre, Ressourcenökonomie an der ETH Zürich. Auf der anderen Seite und in diesen Fall kann man das wahrscheinlich sogar wörtlich nehmen, Irmi Seidl ist Ökonomin an der Eidgenössischen Forschungsanstalt Wald Schnee und Landwirtschaft in Birmendorf und Autorin

und Herausgeberin des Buches Postwachstumsgesellschaft. Neben ihr Matthias Schmelzer, wissenschaftlicher Mitarbeiter am Lehrstuhl für Geschichte der Neuzeit und Schweizer Geschichte an der Uni Zürich und war lange dabei bei der globalisierungskritische NGO Attac. Guten Abend und herzlich willkommen.

Bei der Vorbereitung auf dieses Podium habe ich mich gefragt: Ist es überhaupt möglich frei von Dogmen, frei von Ideologien, sachlich einen Wachstumsdebatte zu führen? Bringen wir das hin heute Abend? ö Das Schweigen verheisst nicht viel Gutes. Die Frage ist ernsthaft gemeint.

4:40 Rudolf Minsch Guten Abend Miteinander. Schwierig würde ich sagen. Wir sind alle sozialisiert worden, im Studium spätestens über die Gedankenwelt, der Theorien, die Diskussionen die wir geführt haben, und wir haben alle, ich jedenfalls, wie vielen anderen wahrscheinlich auch, eine gewisse Sichtweise wie wir den Welt anschauen. Welche Prinzipien wir finden sind wichtig, und welcher sind weniger wichtig, und wie wir durchs Leben gehen wollen. Und dass ist bei der Wachstumsdiskussion auch so. Also ich jedenfalls würde nicht sagen es gibt ein völlige ideologiefreie Diskussion. Es wäre eine Illusion. Die Spannung wäre aber auch zum Teil ein bisschen Weg.

5:27 Brotz oder braucht es auf der anderen Seite gerade diese Ideologie um diese Diskussion zu führen?

5:32 Schmelzer Also ich würde ja sagen dass, wie alle anderen Diskussionen um grosse gesellschaftliche Fragen dass es eine Politische Diskussion ist und als Politische Diskussion geführt werden muss, und diese Frage ist es Ideologie oder nicht eigentlich ist ein bisschen um das Thema vorbeiführt. Es ist also eine hochgradig politische Debatte, weil es geht um die Grundwerte unser Gesellschaft in diese wir in die Zukunft leben wollen, die muss also genauso wie ein politische Diskussion geführt werden.

5:54 Seidl Ja ich würde sagen, es gibt keine wertneutrale Forschung, dass wissen wir, und auch in die Wachstumsdiskussion fliessen Werte ein. Ich denke man muss die Werte klar und deutlich machen, und die weitere Anforderung ist einfach auf nackte Zahlen schauen. Und ideologiefrei Scheuklappenfrei auf Zahlen schauen. Und ich werde in den weiteren Diskussion so ein paar Zahlen aufzeigen, die deutlich machen dass wir in der Zukunft uns definitiv mit dieser Frage

beschäftigen müssen: Wie können wir unser Gesellschaft gestalten wann wir kein Wachstum mehr haben.

6:33 Bretschger Ja etwas mehr auf den Boden, die richtigen Fragen stellen, sich beteiligen, (das machen sie heute auf eine Vorbildliche Art und Weise), mitdenken, und sich einerseits kein Illusion hingeben, andererseits auch sein eigene Möglichkeiten nicht unterschätzen, weil ich immer wieder gesehen habe, ja der kommt alles von oben her, ist ein Zwang, und irgendwie wir können uns nicht entwickeln wie wir das eigentlich möchten, aber eigentlich fragen Sie ja einfach Mal selber welchen Zielen haben Sie im Leben, wo denken Sie dass die Gesellschaft sich einengt, wo denken Sie die Politik Sie keine Möglichkeiten gibt. Wir leben nicht in eine idealen Welt aber wir haben sehr sehr viele Möglichkeiten unser Umwelt zu gestalten, und deshalb ist es wichtig eben, sich bewusst zu werden was ist möglich, wo habe ich meine Grenzen aber sich nicht einfach den Schicksal zu ergeben. Von daher, mein Einstieg wäre zu sagen: stellen wir uns die Debatte und fragen wir uns mal Selber wie wir verändern können, wo wir persönlich stehen in dieser Wachstumsdebatte.

7:29 Brotz Dann gehen wir gleich ans Eingemachte: Kann eine Wirtschaft ohne Wachstum funktionieren? Ja Sie wollen die grossen Fragen diskutiert haben, da sind Sie!

7:42 Bretschger Also ich kann das gerne übernehmen, weil ich habe relativ lang die Wachstumstheorie geforscht und gelernt und unterrichtet. Natürlich kann sie. Die Frage ist was wir wollen. Also Japan, Italien hatten über Jahrzehnten kein Wachstum, und da hat man gesagt dass führt zu ein unweigerlichen Kollaps der Wirtschaft, das geht gegen Null, dass ging nicht gegen Null, aber es ging weder nach oben noch nach unten sondern dass hat einfach stagniert. Aber es war nicht so dass die Leute dass gewollt haben, sondern es war eigentlich ungewollt, also von daher muss man sich fragen eben... woher kommt das Wachstum? Es kommt aus Dingen die wir vermehren, aus den Investitionen, aus den Innovation, wenn man weniger wächst, und auch aus der Bildung im Fall... also die Bildung ist eben die Produktivität der Arbeitskraft die wir veredeln mit solchen und anderen Veranstaltungen. Wenn wir weniger Wachstum möchten oder ein anderes Wachstum möchten können wir es verändern, aber es ist nicht so dass wir zwangsläufig wenn wir dann etwas geringeres Wachstum haben... vielleicht ein Weilchen lang sogar negativ... dann einfach gegen Null gehen... für mich ist entscheidend, was möchten wir? und dann können wir es gestalten über die Märkte aber auch über die Politik, wir können Dinge... Die Zivilgesellschaft ist zurück! Wir können uns überlegen was wollen wir, wir können die Rahmenbedingungen setzen und dann eben gewisse Dinge vorgeben. Nicht alles! Ist mir schon klar, aber viel mehr als wir vielleicht denken würden.

9:00 Brotz Rahmenbedienungen tört immer ein bisschen nach Gummiparagraphen, darüber sprechen wir später dann konkret, aber nochmals aufgemacht gleich zur Kernfrage: Eine Wirtschaft ohne Wachstum, denkbar, machbar, sinnvoll?

9:11 Seidl Wie Herr Bretschger gesagt hat, es ist durchaus machbar, dann wächst es eben nicht mehr, aber ich denke wir müssen uns anschauen: was bedeutet dass? Und in Italien, ich meine es wächst nicht, es schrumpft sogar, aber es ist doch ziemlich problematisch. Sehr viele junge Menschen die weggehen, sehr viele Menschen die keinen Arbeit haben, die sich in allen Städten engagieren und überlegen, wie können wir ohne Wachstum klar kommen... es existieren ziemlich viele Probleme. Das heisst: wenn was nicht wächst, müssen wir überlegen wie gestalten wir unsere Gesellschaft so um dass wir wohl und gut leben können und dass wir die Grundbedürfnisse der Menschen befriedigen können, die zum Beispiel sind: Alterssicherung, Gesundheitssystem, eine gewisse Möglichkeit Beschäftigung zu haben, die Existenzgrundlagen sicher zu stellen. Dass denke ich sind unser grossen Aufgaben. Wir werden weniger Wachstum haben, das Wachstum geht eindeutig zurück, wir können dann nochmals diskutieren weshalb, und ich glaube da besteht auch kein Dissens mehr, und jetzt ist die grosse Frage wie gestalten wir das. Welche Bereiche sind abhängig von Wachstum, und wie können wir diese Bereiche umgestalten. Und dass ist eine grosse Herausforderung an die ganze Gesellschaft... und ich denke wir müssen uns in dieser Gesellschaft diese Fragen stellen und nicht wie können wir noch Wachstum sichern und alle möglichen Instrumente aus der Box holen, die dann wiederum kosten verursachen, ökonomische Schwierigkeiten und Instabilitäten, man denke beispielsweise an die Geldpolitik der Europäische Union aktuell.

10:52 Brotz Dass war ein grosse Tour d'Horizon, nochmals runtergebrochen auf die Frage nach eine Wirtschaft ohne Wachstum?

10:58 Schmelzer Ja ich werde da vielleicht nochmals ein bisschen weiter aushohlen. Also zum einen würde ich argumentieren, dass wie Sie das gesagt haben (Herr Bretschger); dass wir einfach irgendwie eine andere Form von Wachstum haben können; dass wir uns das mit so einer Vorstellung ein bisschen einfach machen. Aber ich glaube wir sollten vielleicht nochmals drauf kommen auf diesen Punkt, ist es irgendwie möglich mit grünen Wachstum diesen Problem im Begriff zu bekommen. Aber ich wird nochmals ein bisschen weiter ausholen und sagen dass im

Prinzip die Frage war ja; kann die Wirtschaft ohne Wachstum funktionieren, und den grössten Teil der Menschengeschichte, hat die Wirtschaft ohne Wachstum funktioniert. Dass ist glaube ich erstmals wichtig sich das so zu gegenwertigen, Wachstum hat erst eingesetzt mit der kapitalistische Industrialisierung im 18te Jahrhundert und bis dahin basierte die Wirtschaft auf organische Energie, das heisst im Prinzip Pflanzen, Tieren und menschlicher Energie, und erst durch den Einsatz von Fossilen Brennstoffen, Kohle, später Öl und Gas, und der Atomkraft ist dieses phänomenale Wachstum der letzten 250 Jahren überhaupt möglich geworden. Und dieses Wachstum ist ein fundamentale zweischneidiges Schwert: Auf der eine Seite ermöglich es, die unglaublichen sozialen Errungenschaften, die wir alle gerade geniessen und erleben, gleichzeitig untergräbt aber auch dieses Wachstum die Lebensgrundlagen dieses Planeten, genau weil es auf diesen fossilen Brennstoffen basiert. Und dass ist glaube ich der Zusammenhang unter dem es diskutiert werden muss weswegen ich glaube die Frage muss eigentlich anders rum gestellt werden:

12:16 Brotz Sie sagen mir schon zum zweiten Mal dass ich eine Frage falsch gestellt hätte. Ich hoffe es geht nicht in diese Stil weiter. Kleine Ordnungsantrag, wir haben wirklich eine Stunde Zeit, wir werden über grünes Wachstum sprechen, über grüne Wirtschaft, Greeneconomy, es wird alles noch kommen, aber am Anfang möchte ich zuerst die Position abholen und spüren für die Leute hier drin die Sie noch nicht kennen sollten, und noch nicht Ihre Sachen gelesen haben sollten wo Sie stehen, darum den Antrag dass man eben an Anfang bleibt, wo stehen Sie und dann sich langsam nach vorne arbeiten. Einverstanden?

12:46 Schmelzer Einverstanden.

12:49 Brotz Wunderbar. Ja mindestens ist wahrscheinlich schon fast eine Frage die ich mir sparen könnte, wann ich Sie [Minsch] frage ob eine Wirtschaft ohne Wachstum funktioniert dann wären Sie beim falschen Arbeitsgeber oder?

12:58 Minsch Schauen Sie was in der letzten Jahrzehnten in der Textilindustrie in der Schweiz geschehen ist. Auch in Europa, die Arbeitsplätze würden abgebaut, die lohnen würde effizienter nach Ausland nach China nach Vietnam nach Pakistan, wo auch immer, und in der Schweiz gibt es immer weniger Arbeitsplätzen in der Textilindustrie. Kann man das beweinen, schlecht finden oder wie auch immer, der Punkt ist, wieso haben wir immer noch heute ein relativ tiefen Arbeitslosenquote? Weil es andere Sektoren gibt, anderen Branche die wachsen. Wir haben eine

Pharmaindustrie, wir haben eine Uhrenindustrie erlebt, die Maschinenindustrie, die Frankenstärke, viele Industrien haben Arbeitsplätzen geschaffen und damit auch den Rückgang in der Textilindustrie kompensiert. Also Wachstum kann man nicht auf den globalen Schienen verordnen, zum Beispiel ein BIP Wachstum von 0.4% sondern es muss noch in den Branchen und noch viel mehr in den Betrieben verordnet werden. Es gibt einfach Unternehmungen, die haben auf das falsche Pferd gesetzt, die gehen ein, die schrumpfen. Aber dafür braucht es andere Unternehmungen die wieder Arbeitsplätzen schaffen, die wachsen, und daher ist Wachstum per se etwas Gutes. . Auch noch kurz: Wachstum ist etwas Gutes! Schauen Sie sich den wunderbaren Hörsaal an. In Mittelalter nach Jahrhunderte Nullwachstum waren vielleicht von zehn Schülern besetzt, wovon der Eliten der jeweiligen adeligen denen Söhnen und Töchtern oder Söhne damals nur geschickt haben. Wir haben heute einen unglaublichen Wohlstand in der Breite. Dass ist nur möglich gewesen durch Wachstum. Sie können studieren weil wir eine wunderbare Wachstumsphase hinter uns haben.

15:08 Brotz Also Wachstum ist ein Indikator von Wohlstand. Das ist eine Übersetzung von dessen was Sie gesagt haben. Dass stellen Sie im Frage? (Frau Seidl)

15:14 Seidl Ja wir wissen, dass Wachstum in den ersten Jahrzehnten nach den zweiten Weltkrieg durchaus korreliert hat mit dem Wohlergehen, klar wenn nach hohl Bedarf da ist und die Menschheit wächst dass es uns besser geht, aber wir wissen auch aus der Glücksforschung, dass in den letzten Zehn Jahren, dass Wachstum nicht unbedingt mit Zunahme von Wohlergehen korreliert, im Gegenteil, es nimmt sogar ab, die Leute sind gestresst, die Umwelt wird schlechter usw. Und die Glücksforscher sagen, wann wir das Wohlergehen weiter erhöhen wollen im westlichen Ländern, es geht nicht mehr um Wirtschaftswachstum sondern es geht um der Natur, Freizeit, Gesundheit, Kultur usw. Für Drittweltländer, Schwellenländer, stellt sich die Diskussion etwas anders, aber es ist eindeutig heutzutage Wachstum nicht mehr zum Wohlergehen beiträgt. Das heisst aber nicht dass ich nicht sage das Wachstum sowie die Gesellschaft heute strukturiert ist auf Wirtschaftswachstum angewiesen ist. Sie ist angewiesen, aber, wir werden das Wirtschaftswachstum nicht mehr haben, wir können es nicht mehr haben weil es an den Ökologischen Grenzen geht, und jetzt ist der Frage, wie gestalten wir diesen Gesellschaft um und dass ist unser grosse Aufgabe.

16:27 Brotz Wollen Sie mit umgestallten Herr Minsch und Herr Bretschger?

16:35 Bretschger Ja aber sicher, gerne. Ich sage einfach noch einmal, ich glaube für viele Länder ist es nicht nur ein bisschen anders, es ist sehr viel anders. China hat 500 Mio. Menschen aus der Armut gebracht, dass müssen wir nicht irgendwie unterschätzen. Und dass sind Dinge die eben früher bei uns auch schon geschehen sind, die wir uns jetzt zu Kenntnis nehmen soll. Und ich habe z.B. auch in Bolivien unterrichtet und die haben mir gesagt also eben, die Fragestellung ist völlig absurd, wir möchten so viel wachsen wie möglich, wir möchten Euren Lifestyle übernehmen. So kann man sich fragen: ja gut, wir haben das denen vorgelebt. In den Movies die sie angesehen haben, ist es alles immer toll mit grossen amerikanischen Autos usw. Vielleicht muss man die Leute noch weiterbilden und sagen schau Mal es gibt doch Alternativen, aber wir waren vielleicht nicht den optimalen Vorbild. Also ich muss mich überlegen wann wir jetzt umbauen, wie machen wir das? Es gibt eindeutigen Rezepten aus der Wirtschaftswissenschaft, die werden in der Öffentlichkeit nicht allzu gerne wahrgenommen, ich kenne dass aus der Klimaverhandlung, wo man eben mit den reinökonomischen Rezepten nicht gut durchkommen, die Leute kümmern sie sich sehr viel um Verteilung z.B. Sie schauen sehr viel wie viel wissen den ärmeren Ländern, wie viel wissen die reicheren Länder. Da ist ein sehr grosses Sensorium. Es gibt noch andere Probleme wann wir diese Gesellschaft umbauen dass wir die Kosten z.B. überschätzt weil wir sehr stark in den kurzen Frist sich verhaftet ist viel zu wenig an die lange Frist denkt, und da gibt es noch etwas die ich vielleicht noch erwähnen kann, wann man den Unsicherheit bedingt, also wir wissen nicht genau wie der Klimawandel wirken wird in den nächsten 15, 100, wir wissen welche Richtung es geht aber wir haben gewisse Unsicherheit, wir wissen auch nicht genau wie der Umbau des Energiesystems dann wirken wird in Schweiz oder auf der Welt und dann führt diese Unsicherheit, dass wir es nicht genau sagen können, bei vielen ein Bisschen Agonie oder zu Untätigkeit und dass ist eigentlich genau die falsche Reaktion, weil wir normalerweise, wann wir unsichere Zustände haben, dass möchte ich gar nicht vermeiden, wir zahlen Versicherungsbeiträge so wir das vermeiden können, also wir müssen eigentlich mehr tun so dass der Umbau der Wirtschaft etwas mehr vorantreiben damit wir den Unsicherheit verbinden können und damit wir auch in der Zukunft eben eigenters eine schöne Entwicklung haben.

18:31 Brotz Frau Seidel?

18:34 Seidel Ja ich möchte vielleicht kurz was sagen zu Entwicklungsländern und Schwellenländern: das kommt immer, Wirtschaftswachstum vielen Ländern geholfen hat aus der Armut zu kommen, zu führen, ja zum Teil. Aber ich möchte das Beispiel Indien anführen. In Indien ist immer noch der Hälfte von der Bevölkerung weniger als zwei Dollar, die Hälfte der Bevölkerung hat keinen sanitären Anlagen, obwohl starkes Wachstum stattgefunden hat. Es hat ein Wachstum ohne Entwicklung stattgefunden. Das heisst wir müssen uns wirklich auch fragen welche

Entwicklung findet in diesen Ländern überhaupt statt, und Wachstum per se bringt nicht Entwicklung.

19:15 Schmelzer Ja vielleicht kann ich bisschen anknüpfen weil es hiess Wachstum ist per se was gutes und ich würde den fundamental widersprechen weil Wachstum ist einfach nur ein statistische Massstab der vor gut 70 Jahren erfunden würde, und da gibt es eine riesig grosse Diskussion drum was an diesen Massstab ganz konkret problematisch ist. Wachstum ist unter Umständen was gutes aber unter Umständen ist es auch nicht was gutes und dass sieht man am Beispiel Indien ganz fundamental und sehr anschaulich. Aber die Diskussion ist nochmals grundlegende eine andere für die Reichen und auch historisch in den letzten 200 Jahren profitiert haben von den Wirtschaftswachstum und gleichzeitig die ökologischen Probleme mit zu verantworten haben, für diese Ländern ist die Situation eine komplett andere worauf die Frage ist: Ist Wachstum eine Lösung?+oder eine zukunftsfähige Vision, oder nicht, grundlegen anders beantwortet werden muss als für die Ländern die eben erst in den letzten Jahren die Wachstumsschub hinter sich haben. Also ich glaub man muss da ganz grundlegend unterscheiden, und ich würde sagen die Frage fällt auch für beide grundlegend anders aus.

20:10 Brotz Das heisst für Sie auch zusammengefasst: Wachstum ist aus Umweltschutz-gründen und aus moralischen Gründen eigentlich verwerflich.

20:18 Schmelzer Nicht Wachstum per se, sondern ich würde argumentieren dass, um Entwicklungsmöglichkeiten für die armgemachten Ländern im globalen Süden zu ermöglichen in den nächsten Jahrzehnten, ist es eine grundlegende Voraussetzung dass wir im globalen Norden unser Produktion und Lebensweise überdenken und umbauen und dass bringt auch mit sich ein drüber hinausgehen der Wachstumspolitik und die Wachstumsfixiertheit der Politik.

20:42 Brotz Ob die Gesellschaft zu diesen umdenken bereit ist bin ich dann gespannt vor allem auch in der Fragerunde wann dann konkret aufmachen kann ob diese Verzicht um den es am Schluss dann auch geht, ob der persönliche Verzicht auch, ob der bei den Leuten hier ankommt oder nicht. Aber nochmals das aufgenommen von diese Seite her: Wachstum nicht unbedingt als Indikator für Wohlstand. Heisst das umgekehrt dann gefragt auch dass ein Nullwachstum unsern Sozialstaat bedroht?

21:09 Minsch Wir haben im Moment in der Schweiz immer noch ein Sozialsystem, das sehr stark auf Wachstum ausgelegt ist, also wenn wir das Wachstum auf null reduziert dann bedeutet dass, für die Sozialwerke auch dass die Versprechungen kleiner werden. Also dass bei der AHV, bei der Pensionskasse, dass die Renten nicht mehr so ausführlich bezahlt werden können, und dass dort ein gewisse Schrumpfungsprozess notwendigerweise der Fall sein wird. Das heisst nicht dass man nicht damit umgehen kann. Also, es ist eine Frage der Politik.

21:47 Brotz Sie sagen dass relativ lapidar, aber Sie machen den Leuten Angst damit!

21:51 Minsch Nein, ... also dass sind ökonomische Zusammenhänge.

21:55 Brotz Aber die lösen immer auch etwas aus. Wann Sie sagen die Leute draussen: Ihren Renten sind einfach kleiner, wir müssen damit umgehen, dann ist das lapidar.

22:05 Minsch Aber es ist so. Ich würde aber gerne zu die gegenteiligen Meinung noch ausdeutschen nämlich ist der Staat wirklich verantwortlich dafür Wachstum zu kreieren? Und da würde ich den Stand schon verneinen, also die zwei Beispiele die Frau Seidl erwähnt hat; die expansive Geldpolitik, dass kann nur ein Staubeuer sein. Dass ist keine langfristige nachhaltigen Wachstumspolitik. Auch die Schuldwirtschaft die die Weltwirtschaft erlebt hat vor der Finanzkrise ist kein nachhaltige das wissen wir, das haben wir schmerzlich erfahren, das ist keine Nachhaltige Politik die Wachstum generiert. Die kann nur Wachstum kurzfristig anfachen.. und nach mir die Sint-Flut deshalb bin ich auch ziemlich kritisch ob das Schuldwachstum in Japan die erwünschten Ziele erreichen wird. Also Wachstum einfach nur um die vorübergehenden Probleme weg-zu-glätten das ist sicher der Falsche Weg, aber eine Wirtschaftspolitik zu haben die Wachstum solider Weise ermöglicht, und da sind wir in der Schweiz in ein relativ guten Lage, dass wir es geschafft haben gesunde Staatsfinanzen zu haben, gut die Nationalbank musste leider auch eingriffen aufgrund der Geldpolitischen aussergewöhnlichen Lage rund um die Schweiz, aber wir haben es eigenermassen geschafft ein Wachstum auch in der letzten Jahren herbei zu führen bzw, eben, die Wirtschaft hat das gemacht, wo die Zahlen eigentlich ziemlich gut dastehen. Wir haben bei der ökologischen Bilanz der CO2 pro Kopf Belastung der Schweiz stagniert, und tendenziell rückläufig, wir haben den Gesamtenergieverbrauch, der auch entkoppelt ist von Wirtschaftswachstum seit

geraumer Zeit, wir haben dieser Entkopplung in der Schweiz. Und wir stehen in internationalen Vergleich sehr gut da und von dem her...

24:17 Brotz Alles im grünen Bereich aus Ihrer Sicht? Es gibt keine Gründe das Schweizer Modell in Frage zu stellen?

24:26 Minsch Es gibt...

24: 28 Brotz Sie [Seidl] wollen eine Frage stellen, ich komme danach

24:30 Seidl Ja, und zwar das Wachstum in der Schweiz ist wirklich sehr bescheiden. Von 2009 bis 2013 war es 1.2% Gesamtgesellschaftlich aber pro Kopf 0.4%, also ich meine das ist Minimalwachstum.

24:43 Brotz Prognosen sind sogar eben von der UBS zurückgestuft worden.

24:46 Seidl Aber sie gehen sogar noch zurück, also ich glaube wir müssen nicht Sand in die Augen streuen lassen, das die Schweiz so ein hohes Wachstum hat, das ist wesentlich bedingt auf die Zuwanderung. Dass ist die eine Geschichte, die zweite ist, ja es stimmt die Schweiz hat kaum Verschuldung, geringe Verschuldung, dass hängt stark mit den Politischen System zusammen aber die Schweiz verbaut unendlich viel Land! Dass kennen Sie selbst, wir haben auch regelmässigen Abstimmungen, das Wachstum der Schweiz geht auf die Fläche! Der Bundesrat hat 2002 beschlossen dass die Siedlungsfläche pro Kopf 400 Quadrat Meter sein soll. Jetzt sind wir bei 406 und es geht so weiter. Also ich denke wenn andere Länder kosten im Wachstum in der Verschuldung haben dann hat die Schweiz sie zum Teil im Flächenverbrauch. Unser Flächenverbrauch bedeutet eine unendliche Verschandlung der Landschaft und bedeutet Zerstörung von Ökosystemen Störung von Landwirtschaftsfläche die wir später brauchen von schönen Landschaften usw. Also auch die Kosten von Wachstum in der Schweiz sind ziemlich hoch.

25:56 Brotz Also bevor Herr Schmelzer reagiert, anerkennen Sie diesen Widerspruch der Frau Seidl aufzeigt?

26:00 Bretschger Also das sind nicht Widersprüche, das sind Probleme die wir haben in unserer Entwicklung und ich möchte das etwas breiter sehen: Wir haben jetzt immer von quantitativen Wachstum besprochen, ich glaube es gibt die alten Unterscheide, quantitatives und qualitatives Wachstum und wir müssen es wieder Mal hervorklammern und es ernst nehmen. Wir haben jetzt je einen Laptop und ein Mobiltelefon und es in fünf Jahren nochmals fünf von jedem und dann zehn und dann dass bringst irgendwie nichts. Wobei ich staune jetzt nicht ich bin immer noch bei den Altmodischen Menschen. Ich habe einen Bildschirm vor mir, meine Mitarbeiter haben schon zwei und drei Bildschirme. Ich weiss die Börsenhändler haben dann 50 Bildschirmen immer vor sich. Ich weiss nicht ob dass der Vorschrift sein soll. Also wie gesagt, ich stelle mir vor dass, wir uns wirklich überlegen was wirklich für uns einen Nutzenzuwachs bringt, dass ist qualitatives Wachstum und man sollte sich fragen was sollte sich entwickeln in unseren Leben. Nicht immer mehr vom selben aber es soll in ein verbesserte Entwicklung münden das kann durch Technologie gehen kann aber auch in sozialen Beziehungen sein oder es können auch verbesserte Institutionen sein, dass geht, es ist eben auch Wachstum. Man weiss das arme Ländern vor allem arm sind weil Institutionen total schlechte funktionieren. Also auch da kann man eben sich verbessern im Zusammenleben, und jetzt haben wir auf der globalen schienen das Klimaproblem. Auch da haben wir eine Institutionelles Problem, wir müssen eine gemeinsame Leistung bringen und die Weltgemeinschaft beginnt sich zu finden aber es ist ein langsamer Prozess aber das ist für mich auch Entwicklung, obwohl es sich dann nachher nicht in BIP-wachstum in Franken in Rappen ausdrückt, es geht der Menschheit nachher viel besser. Also wir müssen eine neue Verständigungsbasis bringen und natürlich ich bin nicht ein schön Schwätzer ich würde nicht sagen dass es keine Probleme gibt und das Wachstum ist generell etwas Gutes ist, sondern wir müssen versuchen, durch die... jetzt da komme ich wieder mit den Rahmenbedingungen. Verteilung ist wichtig, die Unsicherheit zu verringern ist wichtig. Eine solche Entwicklung bringt den Menschen wirklich einen Zufall. Ich bin ein Happiness Fan aber ich bin ein Kritiker von Happinessforschung weil dann wird von allen gesagt also wann ich ein Fünftel von dem verdiene was ich heute verdiene würde es mir viel besser gehen. Aber dann sage ich dann geben Sie doch vier Fünftel mir da haben wir eine win-win Situation, ja nein, so ist es nicht genau. Also passen Sie auf, die Argumente sind ein bisschen zu schnell auf den Tisch und Sie müssen sich selber überlegen eben wenn ich in der langen Frist einen sehr hohen Lohn haben will oder will ich einen mittleren Lohn haben, will ich einen tiefen Lohn haben. Dass ist dann ihr persönliches Wachstum, und wann alle ein Lohnerhöhung fordern dann bin ich schon auf der Seite, es muss irgendwo her kommen, dann brauchen wir Wachstum. Aber wenn ich sage, ich habe lieber einen schönen Freundeskreis und der Lohn ist mir nicht so wichtig, dann drückt dass sich im BIP nicht aus aber trotzdem in der Lebensqualität, und das ist das Ziel am Schluss.

28:36 Schmelzer Ich würde Mal ganz kurz drauf eingehen, weil Minsch da jetzt gesagt hat, dass in der Schweiz die CO2 Bilanz stagniert, und dass Entkopplung stattfindet, also dass im Prinzip kein Problem gibt. Und ich glaube damit machen Sie sich viel zu einfach. Weil der durchschnittlichen Verbrauch der Schweizer Leben ist ja viel zu hoch. Und wann man die Klimaforschung ernst nimmt muss man innerhalb von sehr kurzer Zeit reduziert werden und zwar um die 80 oder 90%! Und da bringst jetzt nichts wann der CO2 verbrauch stagniert. Und so ein minimale relativ Entkopplung, dass heisst der CO2 Verbrauch bleibt jedes Jahr gleich auch wann die Wirtschaft um die 0.4,0.5% jährlich wächst, dass reicht überhaupt nicht. Wir brauchen viel viel mehr, wir bräuchten mehr Effizienz. Wenn wir jedes Jahr um ein Grössenordnung von 6-10% würde ausgerechnet um ökologische Nachhaltigkeit und sozialen Gerechtigkeit irgendwie in Einklang zu bringen. Und es gibt dafür bisher kein plausibeln Szenario wie der Leben aufs Welt mit 9 Milliarden überhaupt noch möglich sein soll. Ich glaube dass sind die Fragen womit wir uns wirklich ernsthaft beschäftigen müssen hierangehen an dieser Themen.

29:50 Minsch Ich bin einfach Realist. Und was in der Schweiz gemacht worden ist, wir haben schon viel gemacht, die Wirtschaft hat erhebliche Anstrengungen unternommen und wir haben diese Entkopplung in der Schweiz, das ist in anderen Ländern nicht der Fall. Und jetzt der Paris Deklaration erlebt mit den Zielen für 2030, unser Problem ist vor allem dann wann allen anderen es nicht erreichen wollen und wir es kritisch umsetzen. Also wir haben ein sehr sportliches Ziel von 50% bis 2030, bis 2020 wird die Schweizer Wirtschaft so sein dass die Kyoto Ziele erreichen wird als eines der ganz wenigen Ländern weltweit. Und dass kann man nicht sagen dass ist ein bisschen etwas. Ja gut wir müssen noch viel mehr machen. Wenn wir andere Ländern überzeugen können, bzw. möglichst viele anderen Ländern überzeugen können wirklich da auch Gas zu geben dann hat die Schweizer Wirtschaft auch kein Problem damit. Wenn wir ein level playing field haben wo sie in anderen Ländern vergleichbare Situationen haben, dann kann man auch durchwegs über strenge Massnahmen diskutieren. Dass Problem ist wann wir ein Insellösung machen beispielsweise an ein Papierfabrik die ein sehr hohen Standard hat, wenn Sie sagen diese müsse noch deutlich mehr Energie reduzieren, dann schliessen sie die Tore, Sie importieren das Papier vielleicht aus irgendwo wo die CO2 Belastung deutlich höher ist, dass ist ökologisch und ökonomisch einen Unsinn.

31:31 Brotz Also die Schweiz kann hier ein Vorbild Funktion übernehmen.

31:34 Minsch Bis zu ein gewissen Grad, aber muss der Realität doch schauen dass die Abstände nicht zu gross sind

31:38 Brotz ...gewisses Grad... das ist wie mit den Massnahmen flankieren das ist ein undefinierte Grösse

31:44 Seidl Herr Minsch, dann müsste ihr Vereinigung mit Fahnenträger sein bei einer Erhöhung bzw. einer Einführung einer ökologischen Steuer. In der Schweiz ist zum Beispiel der Strompreis günstig wie in kein Nachbarland. In Deutschland zum Beispiel...

32:59 Minsch ...die haben die höchste CO2 Belastung Weltweit.

32:04 Seidel CO2 ja, aber der Strom zum Beispiel ist billig wie in kein Europäischen Land. Also könnten wir zum Beispiel den Strompreisen erhöhen. Wäre zum Beispiel ein ziemlich wichtiger und aus der Umweltökonomie ein sehr zu empfehlende Instrument gleich bei der Quelle anzufangen und nicht bei der Senke. Genau und deshalb weil wir jetzt gerade bei den umwelökologischen Instrumenten sind gleich weiter machen. Wieso haben wir, obwohl auch die Mainstream Ökonomie, die Neoklassik sagt Internalisierung von externen Kosten, wieso sind wir da nicht weiter? Weil ständig das Argument kommt; ja dass bremst der Wirtschaftswachstum ab. Und dass ist eigentlich auch eine Motivation weshalb ich mich damit beschäftige. Wirtschaftswachstum oder dieser Ideologie Wirtschaftswachstum zu haben verhindert eine sinnvolle Umweltpolitik.

22:59 Brotz aber ganz konkret nachgefragt, lösen Steuern dieses Problem dann?

33:03 Bretschger Wir können über Steuern sehr viel erreichen. Wir können eben die ökologischen Problem verbessern, wir können auch die Verteilung verbessern, und mir der Frage zwischen Umweltschutz und Wachstum habe ich mich ziemlich lange beschäftigt, und ich habe eben festgestellt wir sind sehr fest ins kurzfristiges Denken verhaftet, wann wir langfristig sich ansehen, und dass können Sie am besten wenn Sie Ländern miteinander vergleichen, dann es ist nicht so dass die Ländern mit tiefen Ressourcenpreisen und Energiepreisen diejenigen werden die Wachstumes El Dorado sind, gar nicht, eher in Gegenteil. Es sind eher diejenigen die die Preise erhöht haben oder ständig etwas höher haben also eben ständig Innovation bringen, um mit

diesen Kapital umzugehen, und ich habe das so ein bisschen den Knappheitsparadox benannt. Wenn alles den Natur bekommen wär, die Palmen da sind und die Tauben gebraten in den Mund fliegen dann haben Sie keine Wirtschaftsentwicklung. Dann ist es einfach schön wie es ist aber es entwickelt sich nichts. Die Schweiz hat auf kalten Boden begonnen, wir haben sehr steinigte Täler und da wo es bearbeitet wird und eben die Industrialisierung dazu, man hat sich sehr viel überlegt wie man die Entwicklung gestalten will und hat auch Fehler gemacht aber letztlich kommt die Entwicklung aus einer bewusste Entscheidung heraus und von daher sind die Steuern wann man sie vernünftig einsetzt ein sehr gutes Instrument. Aber eben zum Beispiel in der USA darf man Steuern nicht erwähnen ausser wenn man sagt zu den Leuten dass man den Steuern senken will, es ist für die Leuten irgendwie, es klingt irgendwie wie nicht richtig dass wenn man etwas mehr zahlen muss für etwas damit etwas gut sein kann. Irgendwie sind wir da noch Falsch auf der Spur. Es kann durchaus sein dass es gut ist wann die Preise ständig sinken

34.38 Brotz Es klingt aber gut

34:39 Bretschger Ja ich weiss es, genau. Also, wir müssen uns langfristig vom Erdöl verabschieden, wir müssen aus der Fossilen aussteigen, und jetzt haben Sie verschiedenen Varianten: Entweder Sie fahren mit den Preisen Flach und werden irgendwann wird dann durch einen Shock überrascht wie es war in den 70er Jahren, oder Sie machen es kontinuierlich Sie können sich jedes Jahr noch etwas innovativer verhalten Sie können jedes Jahr etwas besser werden und dass ist eigentlich viel die bessere Variante für eine Wirtschaft.

35:04 Brotz Sie haben vorher eine wirklich spannende Grundsatzfrage angebracht die ich gerne im Podium hineinbringen möchte. Und dass ist dann nämlich der Frage; ist denn in der Gesellschaft eine Bereitschaft nach weniger Wohlstand da?

35:21 Seidl Dann ist das die Frage: was ist Wohlstand? Wie ich schon es gesagt habe. Der Menschheit geht es darum eine gute Gesundheitsversorgung zu haben, Alterssicherung zu haben, Bildung für Ihre Kinder, gegen Umfälle versichert zu sein, und keine zu grossen sozialen Unterschiede in einer Gesellschaft zu haben. Und wenn die sozialen Unterschiede sehr gross sind, finden sich gleich sehr vielen Menschen sie sich massiv benachteiligt fühlen und dann das als sehr grosse Wohlstandeinbusse betrachten. Wan dagegen eben die Soziale Verteilung gleicher ist und diese Grundbedürfnisse befriedigt sind, dann denke ich kann man das auch verkaufen. Dann ist die Gesellschaft auch bereit, was weiss ich, in gewissen Dingen Nachteile zu haben. Vielleicht ein

höheren Anteil ihres Einkommens für Steuern abzugeben usw. Gerade eben wann die Unterschiede gross sind wenn die grosse Anspannung da ist, sind die Menschen nicht bereit eine Wohlstandseinbusse hinzunehmen. Ich persönlich erlebe dass, dass der Menschen ein sehr grosse Bereitschaft hat über diese Themen zu diskutieren. Wir haben neue soziale Bewegungen in der Einfachheit, Suffizienz, Bescheidenheit, Bewusstsein eine grosse Rolle spielen. Das kommt von Pionieren aus Nischen und ich bin ja relativ sicher, dass das sich noch verbreiten wird. Es ist sicherlich eine gewisse gesellschaftliche Bereitschaft da. Wenn man Umfragen macht sagen die Menschen zu 60% dass sie nicht unbedingt weiter wachsen wollen, aber sie wollen Jobs haben. Und dann ist dann die Frage: Wie sichern wir das Menschen ein Einkommen durch Erwerb haben wovon sie leben können, möglicherweise auf ein niedrigeren Niveau als heute. Wir werden die Arbeitsfrage diskutieren müssen, und dann möglicherweise Zusatzmöglichkeiten haben, Beschäftigungsmöglichkeiten, Strukturen wo sie ein Teil ihres Existenz sichern können, wo sie Beschäftigung haben, wo sie andere wichtige Sozialen aufgaben miterfüllen können. Also ich denke es ist eine Frage wie gestalten wir dieser Gesellschaft. Und es wird keine Frage: verzichtest du auf dein Auto verzichtest du auf deine Fernreisen usw. Auf das Handy, das ist so wichtig die meisten werden sagen %h nein um Gottes willen, auf Smartphone und so will ich nicht verzichten.%o

37:56 Brotz Herr Minsch Sie werden sagen Sie sind Realist und doch habe ich Zweifel in dieser schwierigen Wirtschaftssituation zumindest für die Exportindustrie für die Tourismus bereit ist ihr Streben nach Profit umzudenken hier jetzt plötzlich.

38:09 Minsch Ich möchte die Sektoren und Branchen kurz nochmals Revue passieren lassen: Bildung, Gesundheitswesen, Altersvorsorge, das Geld kommt nicht von Himmel. Das muss jemand erwirtschaften, dass muss Wertschöpfung sein in der Schweiz. Wertschöpfung die erzielt wird durch Unternehmen die Produkte oder Dienstleistungen auf der Markt anbieten und international Wettbewerbsfähig sind. Und wenn sie das sind, Wettbewerbsfähig, dann spriessen auch die Steuerannahmen des Staates dann kann man gewisse Dinge finanzieren. Wann hingegen diese Basis nicht da ist dann kann man alle schönen Gedankenspiele ausseracht lassen.

38:57 Brotz Das sind für Sie nur schönen Gedankenspiele?

38:59 Minsch Die Maschinenindustrie hat am 15te Januar 2015 eine Kostenschock von rund 10%. Sie müssen in kurzen Zeit 10% der Kosten reduzieren. In der Schweiz ging das zum Teil,

einigermassen noch weil wir eine flexible Arbeitnehmerschaft haben. Viele waren bereit längere Stunden zu arbeiten zum selben Lohn.

39:23 Brotz Gut weil die Alternative war rausgeworfen zu werden. Also nicht weil der Bereitschaft sehr gross war sondern weil sich sonst ein neuen Job hätten suchen müssen.

39:31 Minsch Doch doch doch, dass ist ein fundamentalen Unterscheid zu Frankreich. Wir wissen was passieren würde in Frankreich. Dass ist ein wesentliche Standortsvorteil den die Schweizer Wirtschaft hat. Das man flexibel reagieren kann auf Krisen. Aber es ist kein Zuckerschleck bis die Unternehmen fit sind wieder gegenüber einer Weichwährung, und die meisten Mitbewerber der Maschinenindustrie sind aus Deutschland, und Deutschland ja ist mittlerweile Teil eine Weichwährungsunion das gibt einfach Probleme im Weltmarkt um die Schweizer Produkte absetzen zu können. Die haben riesige Herausforderungen zu leisten, und von dem her zu sagen ~~%a~~ gut ihr könnt ja ein bisschen weniger wenn ihr da wollt, dann ist das eigentlich auch eine ein bisschen zu einfache Lösung.

40:24 Seidl Ich denke Herr Minsch, Sie denken einfach sehr linear. Sie denken wenn wir kein Wachstum haben, dann können wir den Gesundheitssektor nicht ausbauen, was weiss ich, dann geht das zurück. Ich glaube wir können es auch umbauen. Wir wissen zum Beispiel dass der Anteil am BIP nicht unbedingt mit der Qualität der Versorgung korreliert. USA hat 15-16% des BIP ausgeben, wir haben 11%. Und ich glaube wir sind alle einigt dass wir lieber hier sind. Und ich denke möglicherweise, also wir hätten sicherlich noch sehr gutes Einsparpotenzial im Gesundheitsbereich dass würde zum Beispiel auch an die Pharmaindustrie gehen und möglicherweise auch an der Medizinal-Industrie die dann nicht mehr Renditen von fünf, acht Prozent haben können auf unsere Kosten, ohne dass wir ein Einbusse hätten. Das ist die einte Geschichte. Die zweite ist dass ich sagen möchte dass Wachstum sogar kostet und auch zu Lasten von Bildung geht. Ich möchte Ihnen hier eine Aussage von Herr Stocker, Kantonal Regierungsrat sagt: ~~%a~~ Bevölkerungswachstum in Kanton Zürich löst kosten von rund 4% aus, hauptsächlich von Gesundheit, Bildung Sozialen und öffentlicher Verkehr. Die geschätzten zusätzlichen Steuererträge aber nehmen nur 1.3% zu. Diese Differenz müssen wir im Griff kriegen+. Das heisst im Kanton Zürich haben wir Wachstum das Kostet es kommt weniger in die Schatullen rein und jetzt müssen wir alle sparen. Wir müssen anerkennen dass auch solche Rechnung gibt und nicht nur das Wachstum uns zusätzliches Geld bingt um Gesundheit und sonstige Dinge auszubauen. Nein im Gegenteil sogar dass Leider gibt es keine oder kaum,

Rechnungen dazu. Aber wir haben sehr hohen Kosten von Wachstum und nicht nur Kosten zulasten der Natur sondern auch zulasten und auf Kosten unseres Systeme.

42:35 Bretschger Also dass ist ein etwas schwieriges Packet hier mit den Zuwandernö

42:39 Seidel Nein es geht nicht an den Zuwanderer...

42:41 Bretschger Ja ja, also dass war ein bisschen die Andeutung. Wir können es vielleicht auf der globalen Ebene sehen. Leute sagen ja: also die Umweltprobleme kriegen wir nur im Griff wann wir das Bevölkerungswachstum in den Griff kriegen. Jetzt interessanterweise, sind diejenigen Länder mit einem hohen Bevölkerungswachstum diejenigen die einen ganz niedrigen ökologischen Fussabdruck haben. Also wenn wir Leute einsparen möchten um das irgendwie kompatibler machen müssen, dann müssen wir bei anderen Leuten einsparen. Aber das will auch niemand so richtig. Also ich denke es ist viel einfacher sich eignermassen sich vernünftig zu verhalten als irgendwie an eine Bevölkerungspolitik zu denken. Ich finde was China gemacht hat finde ich bedenklich sie haben es auch aufgehört damit es war glaub gar nicht so effizient und jetzt gibt es ein Männer Überschuss und dass ist auch nicht besonders erfreulich. Also die sind alle nicht soö [lachen]ö also schauen Sie sich die Geschichten an was passiert. Von daher wird ich sagen natürlich gibt es Anpassungsprobleme und eben die Wachstumskosten sind da, aber letztlich wir müssen einfach schauen dass wir uns an ein Umweltverträglichen Wirtschaftssystem uns einigen. Und da, die Preise sind ein Element, wir haben auch andere Elemente, wir können auch gewisse Produkte aus dem Markt nehmen, wir können anderen Verhaltensweisen vorschreiben aber es sind durchaus Gestaltungsmöglichkeiten, da wir ergriffen können. Vielleicht noch etwas ganz konkretes: Es war schon interessant. Also niemand hat den Frankenschock irgendwie begrüsst. Natürlich waren allen auch irgendwie geschockt. Aber die Reaktionen in der Schweizer Wirtschaft war relativ milde weil dass war die Nationalbank, ja da können wir nicht anders. Und die sind doch eigentlich unsere Freunde usw.

44:14 Brotz Aber Herr Hayek hat von einen Tsunami gesprochen.

44:16 Bretschger Aber er ist eben ein Outsider ich und andern waren ein bisschen mehr integriert-also wann wir ein Energiepreisschock

44:23 Brotz also ich hoffe er erfährt nicht was sie hier gesagt haben...

44:25 Bretschger Doch doch, das darf er erfahren.. Aber das weiss man, er spielt eine bunte Rolle und dass ist auch wichtig. Aber wenn man weiss, wenn man dieselbe Schockwelle von Energiesektor ausgegangen wäre oder vom Staat... er hätte einen riesigen Aufschrei gegeben. Das wird alles abwürgen es wird unmöglich sein und da muss man einfach Dinge im Relation sehen. Also ich würde nie ein solchen Energieschock verschreiben. Das ist der falscheste was wir tun könnten aber wann von der Währungsseite kommt, dann sind wir halt flexibel, dann können wir uns anpassen. Wann es von der Energieseite kommt, dann geht es gar nicht. Aber es gibt Anpassung und wie gesagt wir sind flexibel, also wir können auch richtung ökologie flexibel sein. Können wir unser Flexibilität auch in dieser Richtung nützlich machen.

45:09 Brotz Also Sie sind der Fachmann, kann es zusätzliches Wachstum geben ohne zusätzliche Ressourcen zu verbrauchen?

45:15 Bretschger Das kann es. Ja, aber das Wachstum kann nicht mehr auf endlichen Dingen beruhen, sondern es muss auf Dingen beruhen wo von Material losgelöst sind: Wissen, Humankapital, diese Dinge die können zunehmen. Aber wenn Sie sich fragen ist das Wissen endlich oder unendlich+dann das ist ein metaphysische Frage. Aber ich bin sicher wir können noch ganz vielen gute Innovationen bringen, dass Wissen noch viel grösser, und vielleicht wann wir alles Wissen gefunden haben, sind wir so oder so Reich dass wir dann gar nicht mehr wachsen möchten.

45:48 Schmelzer Also vielleicht nur ganz kurz, den einen Punkt: Er würde uns seit 20 oder 30 Jahren erzählt, dass es funktionieren würde, dass es möglich ist ein Entkopplung von Wirtschaftswachstum von ökologische Nachhaltigkeit zu erreichen. Und die Ergebnisse bisher sind da, aber sind gering. Und die reichen von weitem nicht aus. Und es gibt wirklich keine Szenarien. Deshalb würde ich gern wissen, was das Konkret heissen soll wie Sie das vorstellen, die Klimaziele in den nächsten Jahren zu erreichen bei gleichzeitigen Wachstum. Da gibt einfach keinen Szenarien. Und ich will auf den anderen Punkt zurückkommen, die Frage ob dem Umdenken stattfindet. Und mein Gefühl ist das in den reichen Ländern zunehmenden mehr Leute tatsächlich einen Bewusstseinswandel von Staaten geht und stattfindet. Dass merkt man zum einen dran, dass mehr Leute anders als in früheren Generationen jetzt irgendwie das Gefühl haben das das Leben ihre Kindern nicht unbedingt besser wird als ihr eigenes. Das ist ein

grundlegendes zivilisatorische Umbruch die da stattfindet, die damit zusammenhängt dass die meisten Leute die Erfahrung machen, das Wirtschaftswachstum ihn persönlich nichts bringt, und in die letzten Jahren nichts gebracht hat. Das ihr Leben nicht besser geworden ist durch Wirtschaftswachstum. Und es liegt mich daran die Früchte des Wachstums extrem ungleich verteilt sind, letzens gab es diesen Studie von Oxfam, dass wir mittlerweile einen Ungleichheit Verteilung global in den 62 Individuen so viel besitzen wie die Hälfte der gesamte Menschheit. Muss man sich da vorstellen was für ein Ausmass es angenommen hat mittlerweile. Die sind die Ursachen dafür, neben den steigenden ökologischen und sozialen Kosten von Wachstum, warum immer mehr Menschen das Gefühl haben; ~~das~~ ist keine Zukunft auf die ich irgendwie Lust habe+. Und deshalb, glaube ich, brauchen wir Visionen für eine zukunftsfähige Welt, und zukunftsfähige Entwicklung, die unabhängig von Wachstum funktioniert.

47:30 Brotz Noch bei den 60, 62, das heisst aber eigentlich, 62 die Überwindung des Kapitalismus postulieren Sie hier eigentlich oder?

47:38 Schmelzer Naja, 62 Personen besitzen mehr als die Hälfte der Menschheit, da muss ein ordentlich Umverteilungsprogramm haben, und das wäre noch nicht den abschaffen des Kapitalismus, etwas dass ich durchaus glaube, Piketty hat diese Vorschlag für einen globalen Vermögenssteuer beispielsweise angebracht. Sowas lässt sich durchaus relativ realpolitisch innerhalb von den nächsten Jahren umsetzen, wenn die Wille da ist.

47:57 Seidl Und ich glaub nicht mehr das istö Ich glaube wir müssen uns überhaupt Fragen; ~~ist~~ das überhaupt noch Kapitalismus, ist das nicht Fördalismus ist das nicht Oligarchie?+Was hier, wann 62 Personen so viel besitzen? Also ich glaube jeder der irgendwie Marktwirtschaft vertrieben würde, Kapitalismus müsste sich eigentlich dagegen auflehnen, das kann doch nicht sein die Investieren auch gar nicht mehr diese Leute, sondern die horten nur noch. Also das ist auch noch völlig Wirtschaft schädlich, es ist schädlich für Menschen, wir haben hier inzwischen auch einen umdenken das Stadt das sagt; wenn wir mit dieser Umgleichverteilung so weitermachen, haben wir eigentlich gar niemanden mehr die Produkte kaufen die wir produzieren. Also die sind ernsthafte Diskussionen, und das ist auch der Grund dafür weshalb die UECD sich seit ungefähr sieben, acht Jahren um die sozialen Verteilung sich kümmert. Vorher hat die UECD über Jahre diese Studien und den Schubladen gehalten, dass weiss ich jetzt definitiv von eine Person aus der UECD, und jetzt macht man sich sorgen wenn die Verteilung noch oder weiterhin so ungleich ist oder ungleicher wird, dann kann niemand mehr die Produkte kaufen, die wir hier stellen. Also

wir sind an diesen Punkt. Aber ich möchte eigentlich noch was anderes sagen und zwar zu dieser quantitativen und qualitative

49:15 Brotz Moment schnell, ich will noch schnell bei den Vorwürf der Oligarchie bleiben, der war jetzt einfach so im Raum geworfen, ich finde wir dazu zwei oder drei Minuten verwenden können. Wie kommt dass bei Ihnen an Herr Minsch?

49:27 Minsch Das ist dumm ich habe die Studien angeschaut, vor irgendwie die war in Januar publiziert worden, und war dann kurz zufälligerweise vor den WEF, und ich kann mich nicht mehr erinnern welcher Fehlern drin waren, aber von dem her möchte ich da dazu nicht sagen. Nein, es wird die CS Studiendaten verwendet aber in einer nicht ganz zulässigen Weise. Die CS Studiendaten, die stimmen eigenermassen, und dort stimmt schon, man hat eine klare Ungleichverteilung insbesondere in der USA, wo die Top one percent sehr sehr viel Vermögen kumulieren auf sich. Es ist aber diese Vermögens Diskussion muss man loslösen von der Konsumdiskussion. Dann dort das Einkommen spielt das wesentliche Rolle, und wann wir über die Einkommensentwicklung anschauen, auch hier muss ich die Situation immer ein bisschen relativieren, was wegen was in der USA vielleicht nicht ganz so richtig läuft, heisst das nicht zwangsläufig das der Schluss, ahh ist in der Schweiz ist auch so. Wir haben eine trotz der liberalen Grundhaltung, ein Ginikoeffizient bei der Einkommensverteilung der relative Gleichheit anzeigt deutlich vor den USA, fast schon mit nordeuropäischen Ländern wie Schweden und Dänemark an hergeht. Also die Einkommenssituation in der Schweiz ist nicht so dramatisch so dass die Schere permanent auseinanderdriften würde etc. Wir haben auch hier ein gesellschaftlichen Konsens dass auch der unterste Teil der Einkommenspyramide doch ein anständiges Leben führen kann, und eben nicht ähnlich wie in anderen Ländern, da gebe ich zu, dort gibt es wirklich auswüchse wo die Einkommens und vor allem die Vermögenssituation total auseinander driften, und das ist wirklich problematisch für ein sozialen Zusammenhalt.

51:32 Brotz Also ich habe verstanden er hilft nicht mit beim Umbau der Wirtschaft.

51:39 Seidl Ja, das befürchte ich leider auch. Aber Sie kommen auch schon oft drauf. Das kann man ò Weil ich finde Ökonomiesuisse müsste zu den Unternehmen gehen, zu den Schweizern Unternehmen gehen und sagen, aber ich glaube dass Sie sich dem auch nähern. Zu den Unternehmen gehen und sagen: %wir werden im Zukunft nur noch geringes Wachstum haben, stellt euch drauf ein+. Dass ist das was die Unternehmen müssen wollen. Jetzt mache ich das Eigentlich

müssten Sie das machen. Ich werde öfters von Unternehmen eingeladen und soll was über Postwachstum erzählen, und dann sagen Sie: %Ja tatsächlich, stimmt, wir müssen uns jetzt umorientieren. Und Unternehmen sind ja, das weiss man ja seit Olsen, Unternehmen sind ja da Einzelpersonen schneller als Institutionen und Vereinigungen. Sie kennen die Theorie von Olsen. Aber ich denke gleich wohl haben Sie denn Aufgabe die Unternehmen müssen sich umorientieren. Und die Können das! Wir haben eine Studien machen lassen in Deutschland, in Berlin hat das ein Institut gemacht, und da ist raus gekommen, dass wirklich sehr vielen Unternehmen auch gar kein Wachstum anstreben, kein Wachstum haben, und vor allem auch ohne Wachstum auch klar kommen. Und ich denke da haben wir ein grossen Bedarf, wie machen diesen Unternehmen dass, wie kann man in der Forschung dass voranbringen, wie können Unternehmen sich drauf einstellen. Ist zum Beispiel eine wichtige Frage, neben anderen, was weiss ich, Gesundheitssystem, Krankenversicherung, Alterssicherung usw. Und ich glaube, hier müssen wir einfach ganz kreativ sein, und wir brauchen ganz unterschiedlichen Vereinigungen, wir brauchen auch die Wirtschaft, und ich denke die Wirtschaft sollte ihre Verantwortung wahrnehmen denn sie Sind ist, es wird nicht weitergehen mit dem Wachstum und wir haben ökologische Probleme. Und dass es das durchaus gibt will ich Ihnen zum Beispiel zeigen dass die österreichischen Industriellenvereinigung hat in Deutschland eine Studien Auftrag gegeben an Industrellenvereinigung, und das es so, Arbeit von Arbeitsgeber, Zukunft von Wirtschaft und Gesellschaft unter minimalen Wachstumsbedienungen. Das heisst die fangen an sich zu überlegen, wie müssen wir Gesellschaft und Wirtschaft gestalten wenn es kein Wachstum mehr gibt. Die französische Regierung hat auch den Auftrag, und ich denke da müssen wir ganz schnell voranmachen, wie können wir dann unser Gesellschaft gestalten und so gestalten dass sie gerecht ist, dass sie allen Menschen mitnimmt, dass sie ökologisch verträglich ist. Dass sind die Herausforderungen.

54:26 Brotz Die Wirtschaftö

54:30 Minsch Also die einzelne KMUs brauchen hier keine Beratung. Die haben so viele Herausforderungen zu leisten. Sie müssen sich permanent auf den Markt einrichten. Ob das Wachstum jetzt 0% oder 1.5% beträgt, das gesamtwirtschaftliche Wachstum ist ein Unternehmen eigentlich nicht, nicht gerade gleich, aber trotzdem das Unternehmen muss damit umgehen können anyway. Was hingegen bei diese Überlegung stimmt, ist dass wir langfristig mit tieferen Wachstum raten zu rechnen haben in Europa vor allem auf Grund der demographischen Entwicklung. Und auch, was bevor noch kurz gesagt, wegen der Geldpolitik und Schuldenwachstum, das geht nicht immer weiter, so von Staaten im langen Zukunft von dem her, müssen wir schon einstellen auf gesamtwirtschaftliche Wachstumsraten die generell tiefer sind. Aber die Unternehmen, wenn die Freiheit haben zum Agieren, und dass zu tun was aus ihre Sicht

am besten ist, dann finden sie auch einen Weg, dafür brauchen sie nicht unbedingt politische Beratung von gewisse.

55:36 Brotz Also das Angebot Frau Seidl als Mitarbeiterin von Economiesuisse einzustellen ist verschöben zurückgewiesen worden, der Versuch eine Mediation zu betreiben, vielleicht Herr Professor was würden Sie vorschlagen so dass die beiden Seiten sich annähern?

55:51 Bretschger Ja sie sollen einander zuhören natürlich. Aber ich weiss nicht genau wer was von wem braucht. Ich versuche halt irgendwie der Wahrheit nachzugehen, und schauen was wir für Möglichkeiten haben, weil letztendlich will ich dass wir ein Möglichkeitsraum noch haben, und dass wir dem ausschöpfen. Vor allem wann die Sachen mit dem ligurischen hochgebracht. Im vielen Bereichen der Erde haben wir kein Marktwirtschaft im eigentlichen Sinn, wir haben ganz komischen Mischsysteme. Im vorehemaligen Ostblock im Soviejetunion das ist keine Marktwirtschaft, das ist eben Oligarchentum. Und dann kommen die grossen Vermögen irgendwann im London, und haufen zusammen. Dass ist nicht irgendwie was ein Ökonom per se befürwortet. Und noch viel extremer, also ich meine in den USA haben wir gesprochen, Indien haben wir auch schon abgehackt, China ist auch ein interessantes Beispiel. Das sogenannt noch kommunistisch ist, hat ein kommunistische Partei aber die Löhne drückt. Aber ich weiss nicht vielleicht in ein erz-kapitalistisches System würde sogar höhere Löhne zulassen, also sind ganz komischen Entwicklungen, und irgendwann rumpelt es in den nächsten Jahren. Und dahin wird es uns auch nicht ohne Einwirkung, eben es wird nicht ohne Spuren an uns vorbeigehen. Also diese politische Verwerfungen werden kommen, weil diesen Systemen so nicht stimmen. Aber ich glaube der Soziale Marktwirtschaft ist das was wir eigentlich am besten bisher gedient haben. Wir haben schon vielen alternativen versucht, und es ist nicht so gut herausgekommen dabei. Und von daher würde ich sagen eben man soll die Kräfte einsetzen, man soll die Individuen einsetzen die sich eben in ihren Bereich anstrengen. Mann soll auch die Bildungsinstitutionen unterstützen, man sollte die Sozialen Auslauf fördern und die Ökologie vorantreiben. Und dann haben wir im Prinzip die Möglichkeit eben eine Entwicklung so zu gestalten wie wir sie eigentlich haben möchten. Aber dass das was an der heute realen Welt geschient ist alles optimal ist, dass finde ich

57:34 Brotz Das sind alles Herkules Aufgaben die Sie gerade beschrieben haben. Wer soll die dann bewältigen? Der Staat?

57:37 Bretschger Ja wer ist der Staat? Das sind wir. Und nicht nur am Sonntag. Sondern offenbar müssen wir uns ein bisschen mehr einsetzen, und jeder, da wo er kann. Ich habe mich eben in die Klimapolitik eingehängt, dass war mühsam, aber ich habe gedacht da ist etwas wo ich tun kann. Und jeder wird in seinem, ihrem Bereich etwas finden wo man eben sich engagieren kann. Also ich denke es ist wirklich etwas, ja einfach, wann man sagt wie die die am Fernsehen kommt, die ärgern mich allen, die ärgern mich eben auch, aber man versucht eben im seinen Bereich wie etwas zu verbessern und ich glaube wir haben Gestaltungsmöglichkeiten. Also ich fand es wirklich falsch wann man sagt der Staat soll alles, und wer ist der Staat. In der Schweiz ist wirklich der Staat, das sind wir, und dass ist ein grosses Privileg. Oder ich sehe oft eben wenn wir im anderen Ländern sich umsieht dass die jungen Leute keine Möglichkeiten haben, sicher nicht dieses Art und Weise wie hier sich einzubringen und verwirklichen also wir müssen diese Privileg auch ausnützen und sich eben in dem Sinn sich einbringen in die Gesellschaft. Und von daher ist der Staat nicht etwas abstraktes, das sind wir alle. Und je besser wir dass tun umso mehr können wir uns auch ausdrücken.

58:42 Brotz Hat ein gewissen Abstimmung, der neuen Begriff der auch den Runden macht dass wir Gesellschaft etwas bewirken kann Herr Schmelzer, wohin wollen Sie mit dieser Zivilgesellschaft?

58:51 Schmelzer Ich würde mit die Zivilgesellschaft, also diese Diskussion wo wir gerade hatten wo es um Gleichheit ging, und im Prinzip es so rüber kam als irgendwie die Schweiz ein Land mit extrem gleichen Einkommen in Kontrast zu den ganzen Oligarchen im anderen Ländern. Ich würde diese Diskussion gerne noch ein bisschen aufbrechen. Weil wann man an das Globalen denkt ist nämlich den Art wie sich Menschen in der Schweiz leben heutzutage extrem ungleich extrem ungerecht, und basiert auf ein extrem ungerechten Wirtschaft- und Ökologisches System. Und es muss mitbedacht werden wie man das im Griff bekommen kann. Und dann irgendwie das Gefühl zu haben, oder zu argumentieren, dass die Soziale Marktwirtschaft gut funktioniert, grenzt an so einen Art extrem utopischen Gestaltungsoptimismus. Weil die Welt verändert sich radikal, und zu glauben dass wir einfach so weitermachen können wie bisher, ist glaube ich eine die gefährlichsten Utopien der Gegenwart. Und wir müssen irgendwie darüber nachdenken wie die realen Probleme die da sind, im Griff bekommen werden können. Und was auch für eine Lösung vielleicht angedacht werden sollten die bisher nicht ausprobiert worden sind. Und dazu gibt es ein riesen Diskussion, ein riesen Teil davon, die Wachstumskritischen Szene ist im letzten Jahren am Wachsen, Da ist auch ein Event, die grossen Nachfrage die es hier gibt. Und ich bin gespannt auf die Diskussion jetzt gleich, weil es gibt schon ein sehr starkes Bedürfnis danach diese Fragen genau zu führen, und in Universitäten stärker zu verankern.

1:00:17 Bretschger Das Gegenteil von einer sozialen Marktwirtschaft ist die unsoziale Planwirtschaft. Ich glaube nicht dass es dann viel besser wird.

1:00:20 Schmelzer Vielleicht gibt es a was anderes...

1:00:24 Seidl Ich würde auch sagen es geht

1:00:25 Bretschger Was denn?

1:00:26 Seidl Nein, es geht nicht nur am Marktwirtschaft/Planwirtschaft. Wir wissen sehr genau, dass es unterschiedlichen Marktwirtschaften gibt. Eine amerikanische Marktwirtschaft ist eine ganz andere als ein deutscher, eine Schweizer, als eine skandinavische. Dass ist die eine Geschichte, wir haben Marktwirtschaften. Dann haben wir auch eine Debatte über commons. Also es geht nicht nur am Staatseigentum, es geht auch am Gemeinschaftseigentum. Diese Commons-Debatte, die haben wir noch nicht Mal richtig ins ökonomisches System reingebracht. Das ist eine riesen Thema, es gibt auch total viele Leute die sich jetzt um diese Commons kümmern, wir können es viel mehr auch in unser ökonomisches System mitreinnehmen. Also ich glaube wir können nicht einfach sagen Marktwirtschaft versus Planwirtschaft. Dass ist viel, viel heterogener und wir können neue Dimensionen auch mit reinnehmen. Also ich denke auch, dass die Marktwirtschaft enorme Vorteile hat eben durch die Koordination, durch die Freiheit usw, aber ich glaube wir müssen auch überlegen, wie können wir die Marktwirtschaft rahmen? In der ökologischen Ökonomie, dass lerne ich meine Studenten, sage ich ~~der~~ Markt ist super, ein sehr guter Koordinationsmechanismus, aber davor müssen wir uns kümmern was ist die Verteilung, und noch in welchen Rahmen, in welchen ökologischen Rahmen wollen wir Wirtschaften+. Und da ist zum Beispiel festzulegen eben, dass wir nicht mehr fossile Energien verbrennen, dass wir nicht mehr Fläche verbrauchen usw. Diesen Rahmen müssen wir uns geben, den Verteilungsrahmen, und dann kann die Marktwirtschaft ziemlich gut funktionieren.

01:02:05 Brotz Also unterschiedliche Rezepte liegen auf dem Tisch, Herr Schmelzer hat vorher Punktgenau angewiesen dass der Zeit jetzt langsam aufzumachen für den Fragen aus der Publikum, es ist in der Tat eine Stunde rum. Und ich bin überzeugt und zuversichtlich und sicher, dass wir viele Fragen haben werden. Nützt die Gelegenheit, die sind wirklich ausgewiesene

Fachleute, wenn auch völlig anders eingestellt hier vorne bereit euren Fragen zu beantworten. Wer macht den Eisbreaker?

Appendix B:

Erklärung betreffend das selbständige Verfassen einer Bachelorarbeit im Departement Life Sciences und Facility Management

Mit der Abgabe dieser Bachelorarbeit versichert der/die Studierende, dass er/sie die Arbeit selbständig und ohne fremde Hilfe verfasst hat.

Der/die unterzeichnende Studierende erklärt, dass alle verwendeten Quellen (auch Internetseiten) im Text oder Anhang korrekt ausgewiesen sind, d.h. dass die Bachelorarbeit keine Plagiate enthält, also keine Teile, die teilweise oder vollständig aus einem fremden Text oder einer fremden Arbeit unter Vorgabe der eigenen Urheberschaft bzw. ohne Quellenangabe übernommen worden sind.

Bei Verfehlungen aller Art treten Paragraph 39 und Paragraph 40 der Rahmenprüfungsordnung für die Bachelor- und Masterstudiengänge an der Zürcher Hochschule für Angewandte Wissenschaften vom 29. Januar 2008 sowie die Bestimmungen der Disziplinarmassnahmen der Hochschulordnung in Kraft.

Ort, Datum: Unterschrift:

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